

THE AMERICAN ELEVATOR AND GRAIN TRADE

Entered as second-class matter June 26, 1885, at the Post Office at Chicago, Illinois, under Act of March 3rd, 1879.

A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

PUBLISHED BY
Mitchell Brothers Publishing Co.

Vol. XXXI.

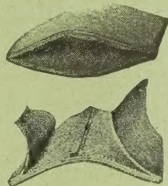
CHICAGO, ILLINOIS, FEBRUARY 15, 1913.

No. 8.

One Dollar Per Annum.
SINGLE COPIES, TEN CENTS.

IF THE PLIES

of your belt separate like
this it wasn't



"R. F. & C." Solid Woven Rubber Belt

The "R. F. & C." gives MAXIMUM of strength and
MINIMUM of stretch. Eliminates all belt troubles.

*A sample will prove most convincing evidence;
send for it.*

W. H. SALISBURY & CO., Inc.

Pioneer Rubber Belt Manufacturers in the West
CHICAGO, ILLINOIS

Let us BUY your grain if you wish to SELL
Let us SELL your grain if you wish to CONSIGN

J. C. Shaffer & Company

234 S. La Salle Street, CHICAGO

COMMISSION MERCHANTS

Also

Buyers and Shippers of Grain

W. M. HIRSCHY, Manager Commission Department

Consign your Grain and Field Seeds to

Somers, Jones & Co.

82 Board of Trade, CHICAGO



**MINNEAPOLIS SEED
COMPANY**

SEEDS

Timothy Our Specialty

MINNEAPOLIS, - MINN.

TRADE MARK REGISTERED IN U. S. A.

The Climax Scoop Truck

Is a scoop on wheels carrying 2½ bushels of grain and 200 lbs of coal. With it
a boy can do more than five men with hand scoops.

Saves time and labor which are money.

Saves fretting and sweating and demurrage bills.

Saves its cost in wear of other scoops.

Be "up-to-date" and ORDER NOW.

Price \$10.00
At Factory.

**Detroit
Scoop-Truck Company**

2227 W. Jefferson Ave.

DETROIT, MICH.



Moline Upright Oat Clipper

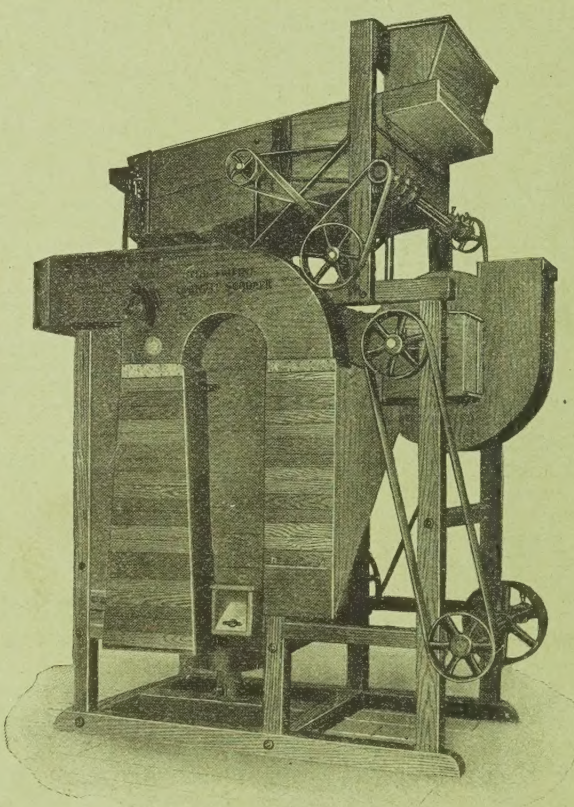
Saves from 40% to 60% of the power required by horizontal machines.

It saves its first cost in a short time and is a money maker all the time.

Unlike other clippers, it clips the ends of the berry the hardest.

**A
Power
Saver**

**A
Money
Maker**



Because of its by-pass spout it is not only a clipper, but can be used as a receiving separator.

Give it a trial.

BARNARD & LEAS MFG. CO.
MILL BUILDERS AND
MILL FURNISHERS
ESTABLISHED 1860. MOLINE, ILLINOIS, U.S.A.

PUT DOLLARS IN YOUR POCKET

That you will save by waterproofing your Storage Bins—Basement Elevator Pits—Scale Pits and Floors—no matter how bad they are—
with

IRONITE WATER-PROOFING**WILL NOT SCALE OFF, DISINTEGRATE OR CRACK**

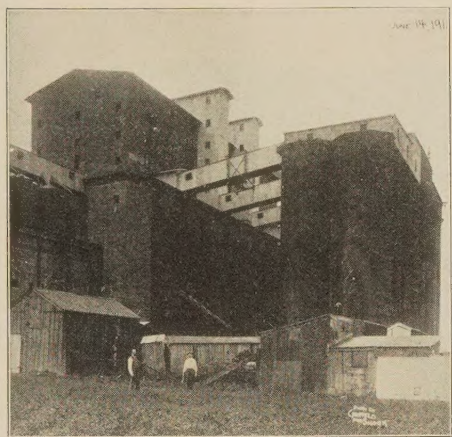
How much have you lost through rusted machinery, water in the boot and basement? How much have you lost on account of moisture in the bins? **IRONITE is guaranteed to stop it.**

Simply mix a little IRONITE and water in a pail and paint the surface two coats—the result will be a continuous sheet of metal that is impervious under all conditions—is a nonconductor and **WILL LAST FOREVER.**

This waterproofing was the only one of 26 makes to successfully pass all the tests made by the U. S. Government—also endorsed by authorities in the U. S. and England.

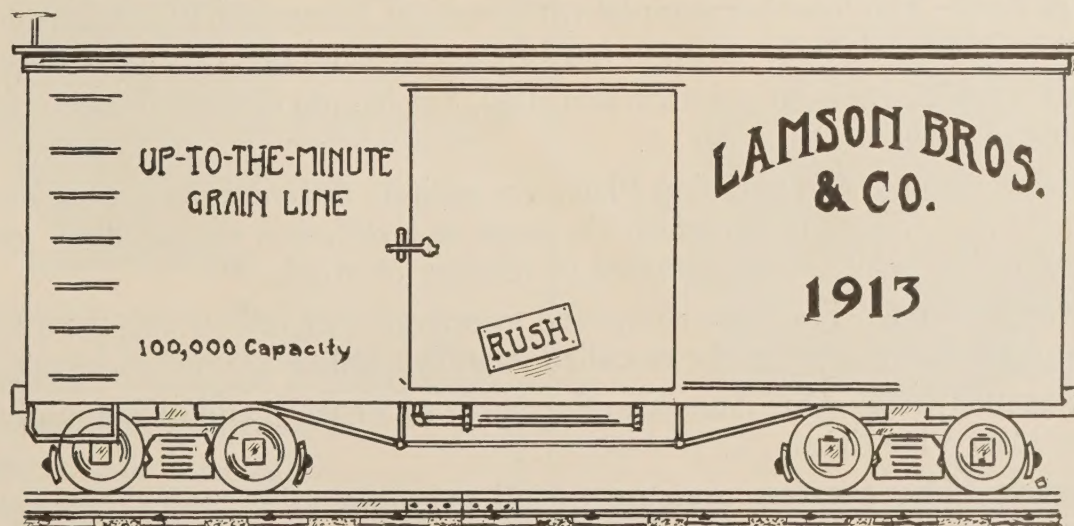
IT IS THE SIMPLEST, SUREST AND CHEAPEST**METHOD KNOWN** to waterproof new or old concrete, brick, tile or stone work.**GUARANTEED—you cannot afford to pass it up—IT NEVER FAILS**

Chicago Ironite Waterproofing Co.
118 N. La Salle St., CHICAGO, ILL.



KENTUCKY PUBLIC ELEVATOR, LOUISVILLE, KY.
Successfully waterproofed with IRONITE.

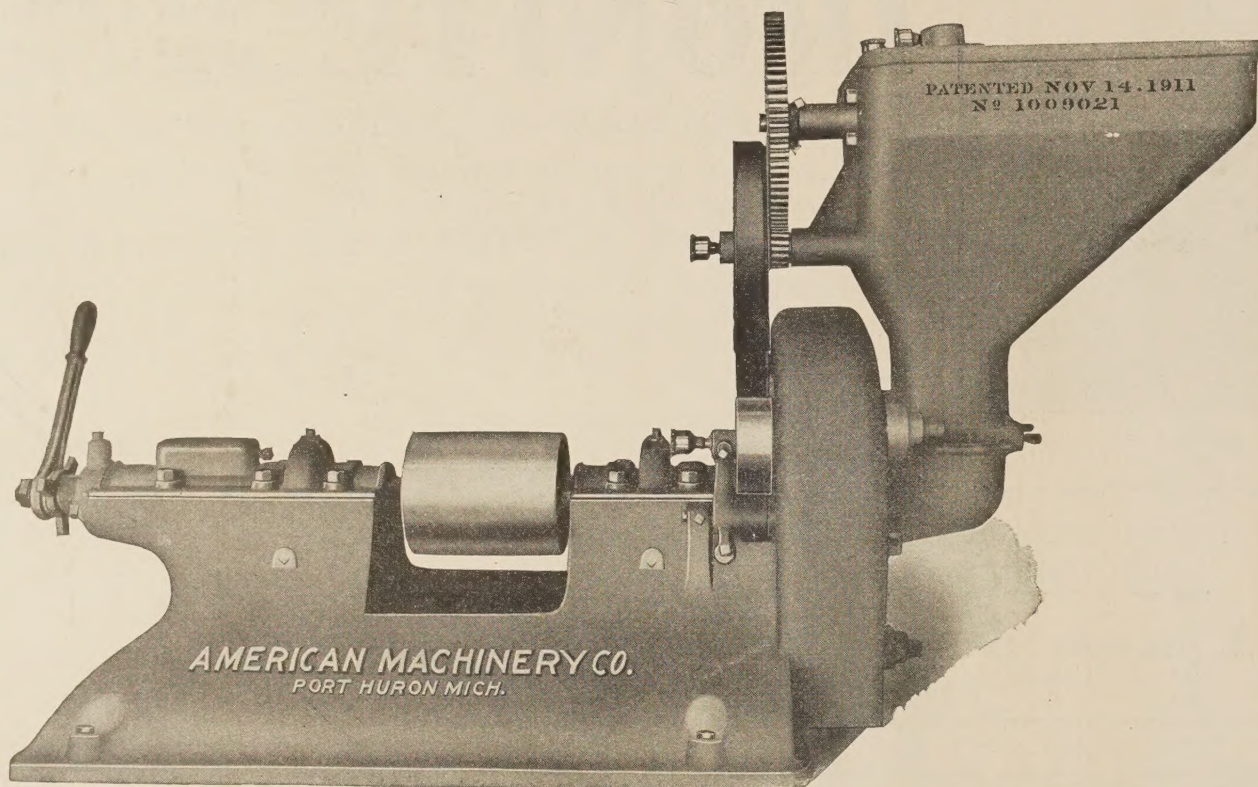
SEND THIS COUPON TODAY
Gentlemen—Without obligating ourselves to you,
please send us full information about IRONITE.
Name Address

MORE GRAIN CARS

are being consigned daily to Lamson Bros. & Co. ¶ If cars are scarce you need the best service on such cars as is obtainable. When cars are more plentiful you still will find our service unequalled.

LAMSON BROS. & CO.**Grain Commission Merchants****Home Office: No. 6 Board of Trade,****CHICAGO, ILL.**

Doesn't This Look Good to You?



Base---Bearings---Case, All Cast Solid In One Piece.

Force Feed—Machine is equipped with vertical Conveyor Force Feeder that will feed evenly crushed ear corn, or any foreign material that may be in the grain.

Shaft—The Shaft is 50 point carbon steel, hot hammered, accurately ground, turned and planished.

Grinding Plates—The grinding Plates are entirely different than those used on Attrition Mills. They cut the grain the same as a roll, and the product ground is soft and bulky, which is appreciated by feeders of stock.

Power Required—The power required to operate our Mill is one-third to one-half that required to operate the so-called Attrition Mills.

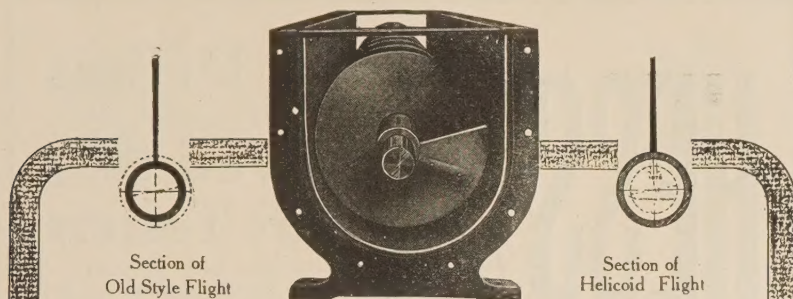
Substantially Built—Our American Special is so strongly and substantially built that it will last a life-time.

Pressure—The greatest pressure on all grinding mills comes on the end of the shaft, and this is equipped with Ball Bearing.

Write for further description, and Net prices to

The American Machinery Company

Port Huron, Michigan



HELICOID

Helicoid conveyor has a stronger flight and a heavier pipe than the same diameter of old style conveyor, and

Helicoid flight and pipe are put together so they support and strengthen each other.

Helicoid flight has a shovel edge. Other has blunt edge.

Helicoid flight is one continuous strip of metal end to end of pipe. Other is short sections lapped and riveted together every turn or half turn around the pipe.

Helicoid is a smooth, nicely-balanced spiral, and has no joints to wear out and open up.

Helicoid requires fewer repairs, and less power to drive it.

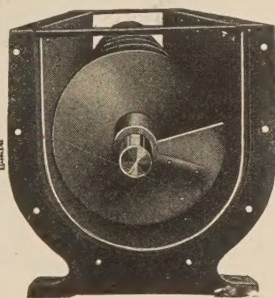
Helicoid costs no more than inferior kinds of conveyor; it's all-round satisfaction at the same price.

Ask about our Steel Conveyor Boxes, too.

H. W. Caldwell & Son Co.

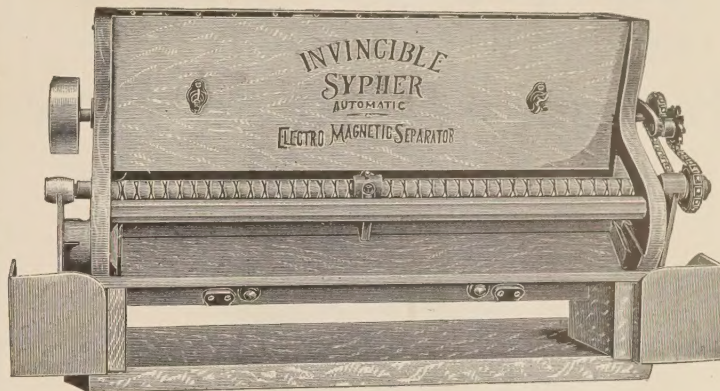
17th St. and Western Ave., Chicago

BRANCH OFFICE



New York:
Fulton Bldg. Hudson
Terminal,
50 Church St.

THE INVINCIBLE-SYPHER Electro Automatic Magnetic Separator



Very Durable—Small Consumption of Current

Will positively remove all iron from the grain.
Has retaining force of 500 pounds, making it impossible for any iron to pass it.

This machine does not deteriorate with age—on the contrary actually becomes more efficient with use.

We are prepared to furnish a small inexpensive dynamo for it where current is not available.

INVINCIBLE GRAIN CLEANER COMPANY

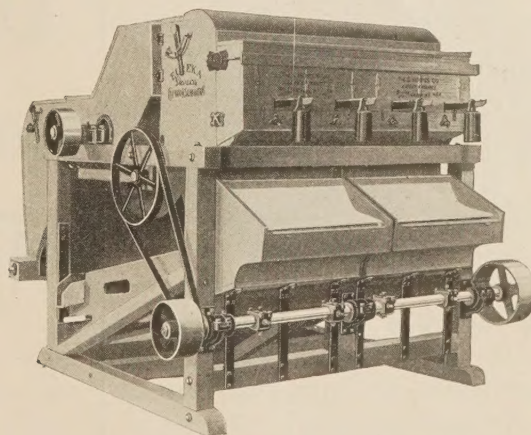
SILVER CREEK, N. Y., U. S. A.

REPRESENTED BY

F. J. Murphy, 225 Exchange Bldg., Kansas City, Mo.
The Strong-Scott Mfg. Co., Minneapolis, Minn.
C. L. Hogle, 526 Board of Trade, Indianapolis, Ind.
Frank E. Kingsbury, Terminal Hotel, St. Louis, Mo.
J. J. Crofut & Co., 613 McKay Bldg., Portland, Ore.
Chas. H. Sterling, Jefferson House, Toledo, Ohio
C. Wilkinson, 6027 Chestnut St., Philadelphia, Pa.
F. H. Morley, 512 Traders Building, Chicago, Ill.
McKain Mfg. Co., Los Angeles, Cal.
Buckley Bros., Louisville, Ky.

The Point Is This:—

Every-day results, week-in-and-week-out, are what create either a gain or loss at the end of the year.



**"EUREKA" TWIN SHOE SEPARATOR
HEAVY DUTY CONSTRUCTION**

Sometimes grain cleaning machinery is bought because of claims based on *dress-parade performances*. Pretensions of certain manufacturers create doubt—their advertising and arguments for sales are sometimes misleading; however, if you purchase your Grain Cleaners by reason of their *Commercial Success*, your choice will be the

"EUREKA"

with its

SUPERB MECHANICAL EQUIPMENT

THE S. HOWES COMPANY
SILVER CREEK, N. Y.

International Sugar Feed Co.

Minneapolis, Minnesota

MANUFACTURERS

International Sugared Dairy Feed

International Special Molasses Feed

International Sugared Horse Feed

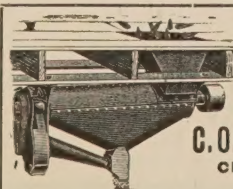
International Sugared Hog Feed

These feeds are unequalled in nutritive value. Sold by dealers everywhere



DUST! DUST! GIBBS DUST PROTECTOR is invaluable to operatives in every industry where dust is troublesome. It has been thoroughly tested for many years in every kind of dust, and is the most reliable protector known. Perfect Ventilation. Nickel-plated protector, \$1, postpaid. Circular free.

Agents wanted. GIBBS RESPIRATOR CO., "B" 124 East Ave., Oak Park (Chicago), Ill.



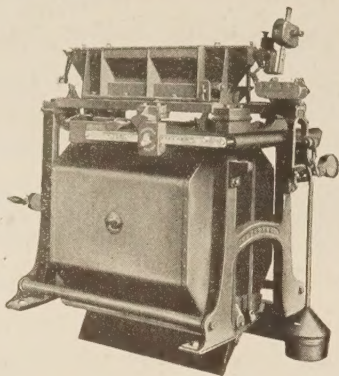
**Triumph
Power
Corn Sheller**

C. O. Bartlett & Co.
Cleveland, O.

Did You Handle 50,000 Bushels
or More of Grain in 1912?

If so you certainly need a

Fairbanks Automatic Scale



It will attend to your weighing while you are busy with other work. Does work more accurately than you can by hand.

It's Simple It's Durable It's Honest

Write for Catalog No. 544 A6 and get details.

Fairbanks, Morse & Co.

Wabash Ave. and Eldredge Place, Chicago, Ill.

Oil and Gasoline Engines, Oil Tractors, Pumps, Water Systems,
Electric Light Plants, Electric Motors, Feed Grinders.

HESS

Grain Driers

All sizes, for all purposes.

Improved BROWN -DUVEL Moisture Testers

High steel stands with shelves;
copper flasks; brass tubes for
gas, gasoline, alcohol or elec-
tricity; oil storage reservoirs.

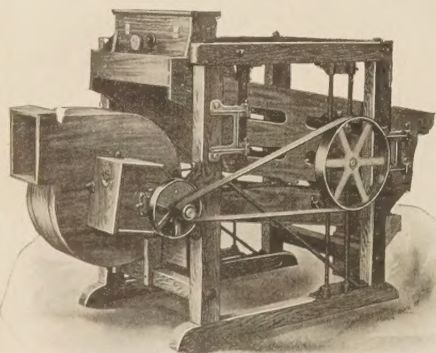
These protect the grain man against incor-
rect judgment in buying, against deteriora-
tion of grain in storage. They enable him
to improve his grain and to tell with abso-
lute certainty that it will make the grade
he wishes.

They are his best INSURANCE against
loss, and they win profits not obtainable
otherwise. Hundreds of dealers equipped
themselves in 1912. *What are your needs
for 1913?*

Hess Warming & Ventilating Co.

910 Tacoma Building, CHICAGO

A new moisture tester booklet with latest and complete instructions for
testing all kinds of grain, is just from the press. Every grain
dealer should have one. Ask us for it.



Wolf Cracked Corn Separator

Just look at this machine!
Does it look strong? Does it
look practical? Does it look
complete?

It's a mighty sturdy outfit,
all right; and will stand the
"thumps" and "bumps" for
many a long day.

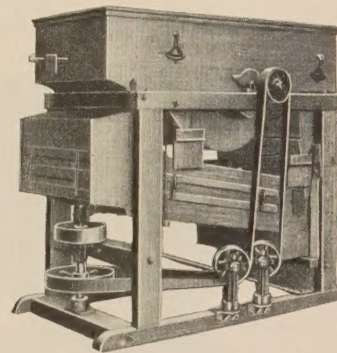
We believe the Wolf Cracked
Corn Separator is good enough
to be sold on trial. We'll send
it that way, too.

Do These Look Good To You?



Full particulars? Sure
thing. What's the name
and address, please?

THE WOLF COMPANY
CHAMBERSBURG, PA.



Wolf Gyratory Milling Separator

The Wolf Gyratory Milling
Separator is for the purpose of
taking out all that dust, dirt,
chaff and other stuff that gets
mixed up with the wheat while
it is in the storage bins. Two
suction legs—one at the head
and one at the tail—and a
large screening surface in be-
tween. Just a little power will
run it.



New Year's

time, time to count the year just past as good, bad or tolerable. Time to reap what we have sown—to reckon again and see where we can improve the record in the coming year. Perhaps this can be done by adding to your equipment machines that are better suited to attain the quality results you so earnestly desire.

Long years of active experience have fitted Nordyke & Marmon Company to help you obtain these quality results. Our experts can recommend effective methods and equipment for your particular need and our factory can supply your demands promptly and correctly.

Let us get together. Write now while the year is young.

Nordyke & Marmon Company

America's Leading Mill Builders

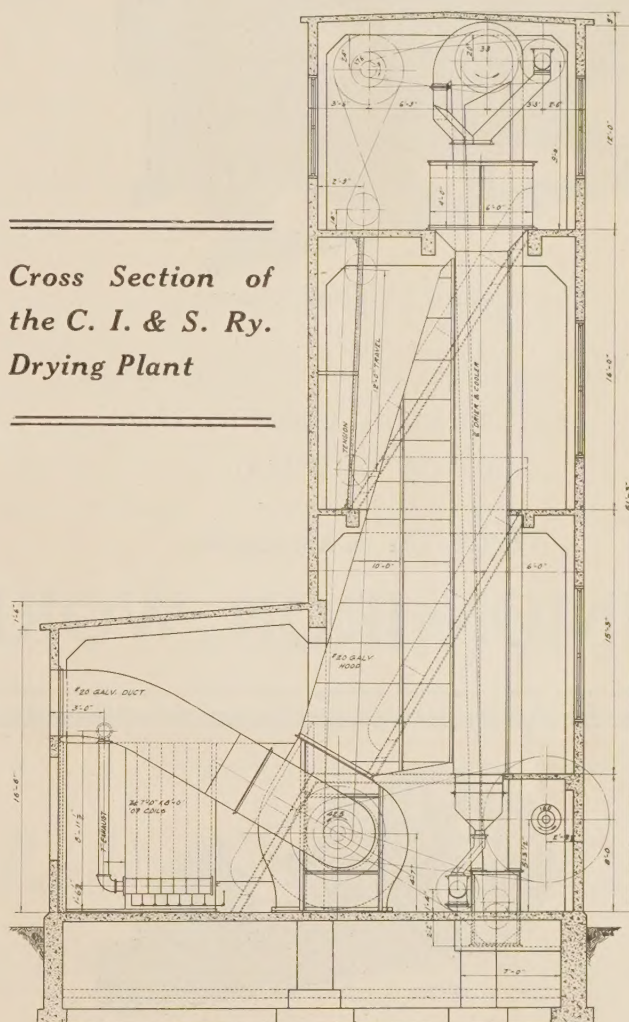
INDIANAPOLIS INDIANA, U. S. A.

Established 1851



THE ELLIS DRIER CO.

*Cross Section of
the C. I. & S. Ry.
Drying Plant*



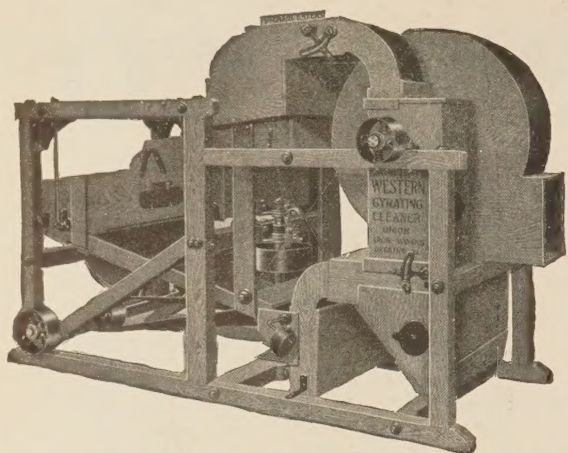
CROSS SECTION

THE section as shown above is that of the drying plant under course of construction for the C. I. & S. Ry., at Schneider, Ill. The cooler is of the independent type and is of very large capacity for the purpose of handling material from the drier when removing small percentages. Both the drier and cooler operate as continuous feed machines. Exceptional economy in operation will be obtained by the utilization of exhaust steam and the use of a return air system. The plant will have a minimum capacity of 700 bushels per hour.

POSTAL TELEGRAPH BLDG.
CHICAGO, U. S. A.

WESTERN

machinery has played an important part in handling the world's Grain crop for nearly half a century.



The Western Gyrating Cleaner

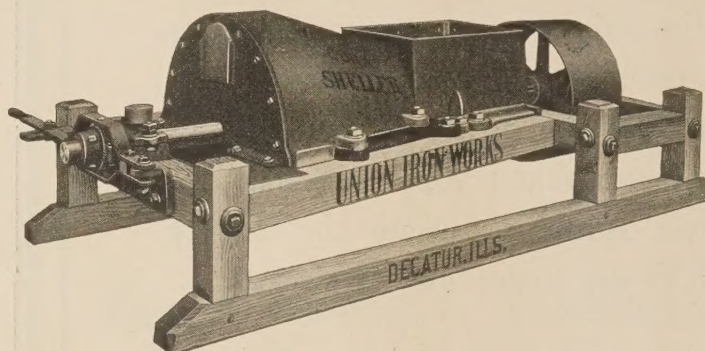
We manufacture everything needed for the grain elevator, from pit to cupola.

Write for Catalogue.

UNION IRON WORKS

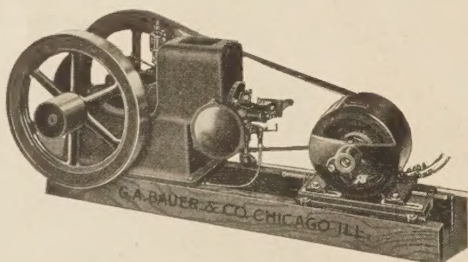
Our SHELLERS and CLEANERS

are the recognized standard wherever corn is grown.



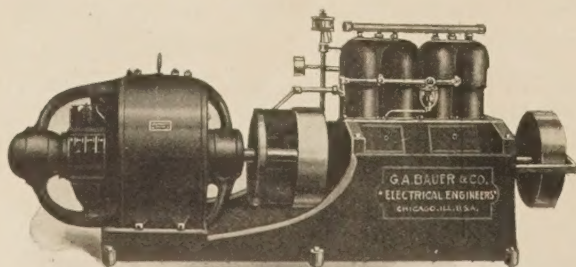
The Western Regular Warehouse Sheller

DECATUR, ILLINOIS



USE ELECTRIC LIGHT *and* POWER

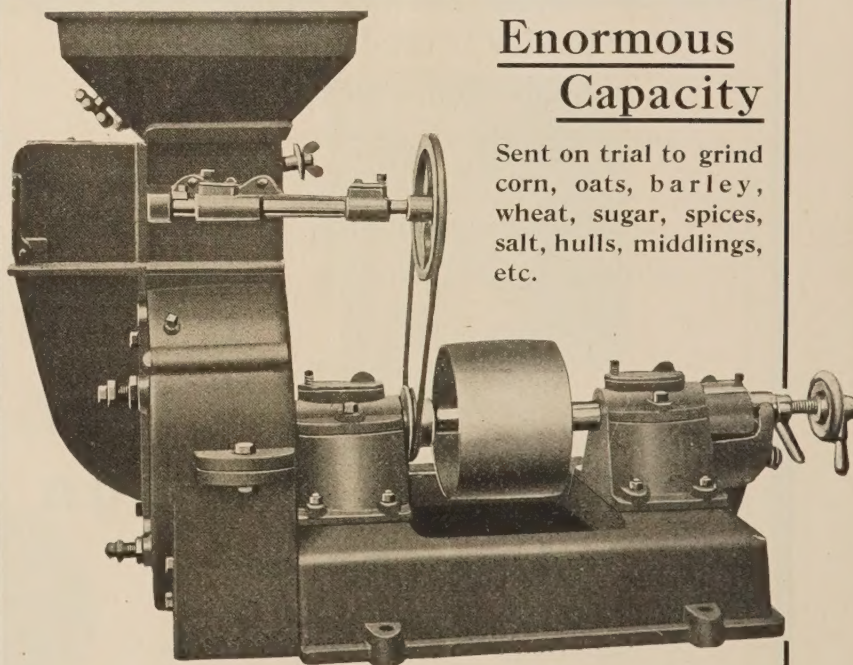
Let us send you our free illustrated catalog telling you how easily and cheaply you can install our electric system of lighting and power. No fire risk—approved by BOARD OF UNDERWRITERS. No engineers required to install these plants. Write at once.



G. A. BAUER CO., 477 West Erie Street,
CHICAGO, ILL.

Enormous Capacity

Sent on trial to grind corn, oats, barley, wheat, sugar, spices, salt, hulls, middlings, etc.



FOUR SIZES — 16 inch, 18 inch, 20 inch, 24 inch

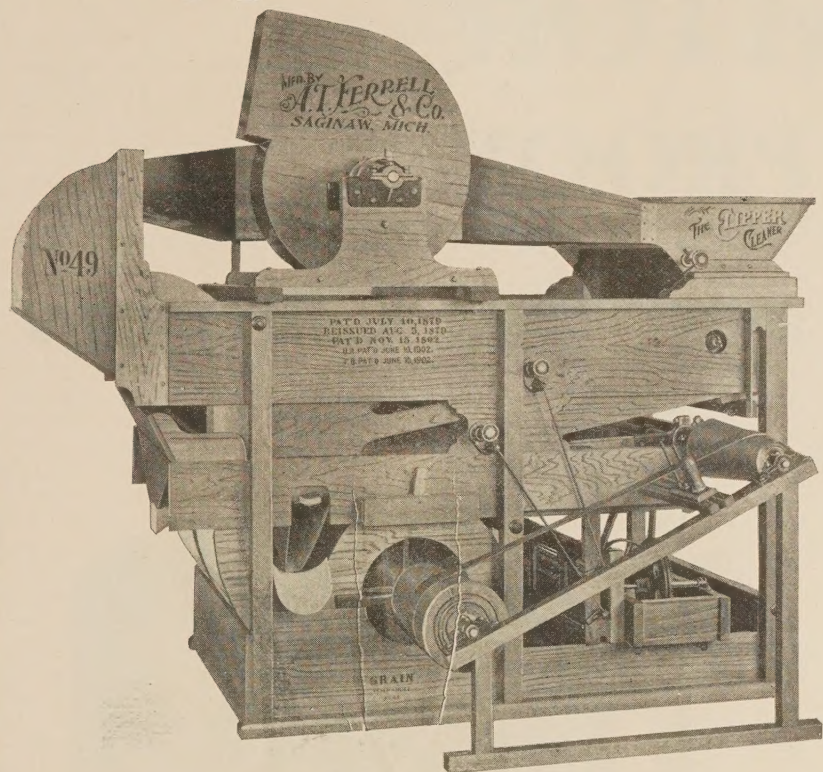
GET OUR CATALOG AND ASK US TO TELL YOU WHAT OPERATORS OF OUR GRINDER HAVE TO SAY—SOME OF THEM MAY BE NEAR YOU

Low Speed—Low Power
Shellers, Crushers, Elevator Equipment

ABSOLUTE SATISFACTION GUARANTEED

The National Company, PORT HURON,
MICHIGAN

"Clipper" Grain and Seed Cleaners

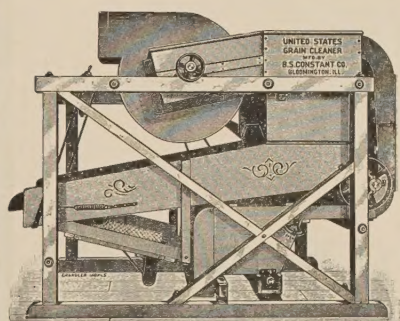


The No. 49 Clipper is a first-class grain receiving cleaner for local elevators. It has large capacity, is solidly built, is dustless and will make the most difficult separations. It is simple, strong, convenient and will not easily get out of order. It requires less for repairs than any other grain cleaner on the market and is always ready for business. Ours is the only successful combination cleaner on the market. We give a 30-day guarantee with each machine.

If you are looking for the best cleaner, we would like to show you what we have. Our line of clover seed cleaners is strictly up-to-date. All sizes and capacity. We can furnish machines with Traveling Brushes, Air Controller and all modern improvements. Send for catalog and discounts.

A. T. FERRELL & CO.,

SAGINAW, MICH.



THE U. S. Grain Cleaner

is the best in the Union and should be in the top of all elevators where Corn, Oats and Wheat are shipped.

Higher Grades—Higher Prices.
Long life machine.
Ring or Chain Oiling Bearings.
Balanced Eccentrix.
Five Separations and

All the Corn Saved.

The Constant Safety Ball Bearing Man-lift

the most satisfactory connecting link between Cleaner and Sheller.

Best made.
Easiest and safest.
Adjustable Brakes
which we guarantee.

State distance between floors and get our

Net Price

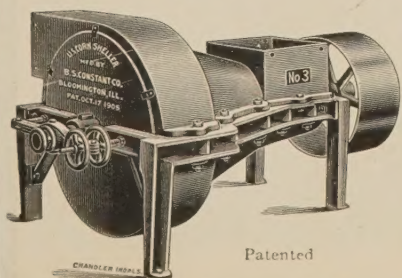
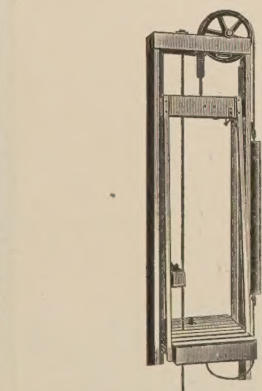
U. S. Corn Sheller

Fan Discharge,
over or under, right or left hand.

Iron or Wood Frame.
No Lower Hopping.
Cheapest Installed.
Quickest and Cheapest Repaired
of any Sheller on the market.

Send for a Catalog.

B. S. CONSTANT CO.
Bloomington Illinois



Patented

E. P. BACON, Prest. W. P. BISHOP, Vice-Prest. J. J. CRANDALL, Secy. and Treas.

E. P. BACON CO.

Grain Commission Merchants

MILWAUKEE—CHICAGO—MINNEAPOLIS

We are conducting offices in each of the markets above named, under the management of experienced Cash Grain men in the respective markets.

We do not engage in buying grain on track or otherwise and are not interested in any manner in the purchase or manufacture of grain of any kind either in the country or at terminal markets; our business being confined to the selling of grain and seeds on consignment for the account of shippers.

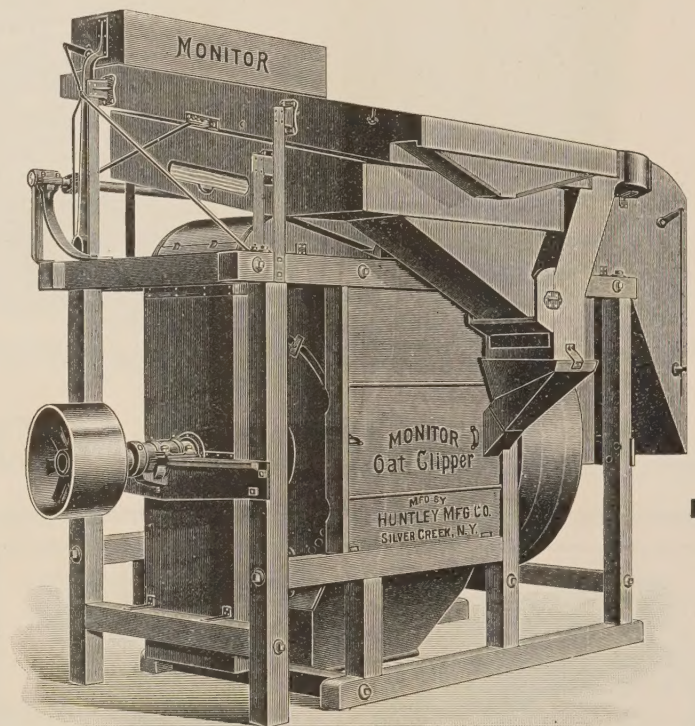
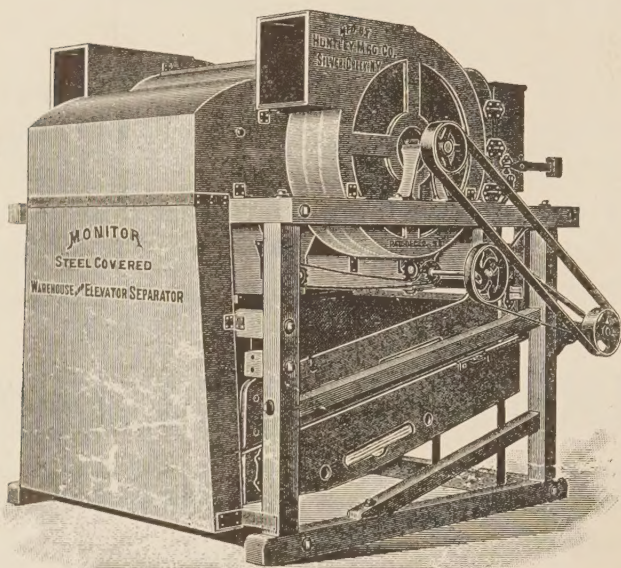
Our managers in the three markets keep in constant touch with each other by wire during trading hours as to the condition of the cash grain market at each place, and by exchanging samples daily by mail representing actual sales.

MILWAUKEE OFFICE
17 Chamber of Commerce

F. D. AUSTIN, Manager
CHICAGO
537 Postal Telegraph Building

W. B. HATCH, Manager
MINNEAPOLIS
618 Flour Exchange

“MONITOR” FIRE PROOF Grain Cleaners and Oat Clippers



Neither fire nor hard service will destroy them

All grain cleaners and oat clippers are not fireproof—all *fireproof* grain cleaners and oat clippers *are not wearproof*. By *combining* “fireproof” and “wear-proof” qualities with the tried-for-thirty-years construction of our justly famous “Monitor” Oat Clippers and Grain Cleaners we have produced machines that are practically indestructible from any cause. We can prove to you beyond a doubt that the largest number of our best equipped fire-proof elevators have adopted these “Monitors”—that they have the preference where *efficiency and durability* are considered first, last and most.

One great big point in favor of these fireproof “Monitors” is—we sacrificed none of the good features of our standard models to get “fireproof” qualities. We guarantee the same wide range of work, the same simplified operations, the same ease of regulation, the same unequalled rate of efficiency and economy which have stood for a quarter of a century as the world’s best in grain cleaners and oat clippers, as any well established grain dealer or handler will tell you.

HUNTLEY MFG. CO., Silver Creek, N. Y.

Minneapolis, Minn.—A. P. Shuler, 316 Fourth Av., South
Chicago, Ill.—F. M. Smith, 501 Traders Building
Portland, Ore.—C. J. Groat, 601 Concord Building
Wichita, Kansas—J. B. Ruthrauff, 301 S. Lawrence St.

AGENTS

St. Louis, Mo.—S. J. McTiernan, 25 Merchants Exchange
Jackson, Mich.—A. H. Smith, 206 Lansing Ave.
Akron, Ohio—A. S. Garman
Owego, N. Y.—J. H. Foote

A monthly journal devoted to the elevator and grain interests.

Official paper of the Grain Dealers' National Association and of the Illinois Grain Dealers' Association.



Published on the fifteenth of each month by Mitchell Bros. Publishing Co., 431 So Dearborn St., Chicago, Ill.

Subscription price, \$1.00 per year.

English and Foreign subscriptions, \$1.75 per year.

VOL. XXXI.

CHICAGO, ILLINOIS, FEBRUARY 15, 1913.

No. 8.

New Elevator at Most Eastern Lake Port

Description of a Recently Erected Concrete Grain Storage Unit, Which Replaces the Old Wooden Elevator at Ogdensburg, Destroyed by Fire Two Years Ago

Ogdensburg, New York, is the most easterly Great Lakes port in the United States. It is true it is not directly on any of the Lakes, but a few miles down the St. Lawrence from Lake Ontario. This means, however, that the advantages of cheaper water freights are increased in the case of Ogdensburg by the comparatively longer water haul.

Not only is Ogdensburg the most eastern port on the Great Lakes in this country at the present time, but it always will be. Immediately below Ogdensburg, the St. Lawrence River breaks into rapids. On the Canadian side of the river, canals have been built around these rapids. On the American side there is no ship canal nor will there ever be, because, just at the foot of the rapids, the international boundary line crosses the river, which, from that point for 1,100 miles, runs through Canadian territory exclusively. Ogdensburg is therefore at the extreme eastern end of the combined

Great Lakes and St. Lawrence River route as far as the United States is concerned.

Unfortunately for the development of the city, nature arranged Lake Erie at a considerably higher level than Lake Ontario. The obstacles presented by the Niagara River have for many years obliged lake traffic to halt at Buffalo and the result has been the development of that enormous grain port. It is true that the Canadian Government has, for a long time, had a canal across the neck of land between Lake Erie and Lake Ontario, but this, the well known Welland Canal, can accommodate vessels of 14-foot draught only, and with a length of approximately 200 feet. Consequently Lake Ontario and St. Lawrence River ports can be visited only by inland vessels of a very restricted size. The larger grain carriers have not thus far been able to run east of Buffalo. As a result, the grain traffic at Ogdensburg has been restricted prac-

tically to that handled by the Rutland Railroad Company on their package freight steamers from Chicago and Milwaukee, with an occasional tramp boat of small size.

The Canadian Government has now started work on a deeper Welland Canal with larger locks. It will be some years before this is completed, but when the work is finished, vessels of 21-foot draught and of Great Lakes size can reach Lake Ontario and go down the St. Lawrence River as far as Ogdensburg. Ultimately, if the Canadian Government deepens and improves the St. Lawrence Canals, these large vessels will also be able to reach Montreal; but even in that event grain carried on the Great Lakes for export from United States points or for domestic consumption in the East will stop at the easternmost United States port, Ogdensburg. Should it occur, as now seems probable, that the deepened Welland Canal is com-



NEW STORAGE UNIT RECENTLY ERECTED AT OGDENSBURG, N. Y.
Designed and Constructed by John S. Metcalf Company, Engineers, Chicago and Montreal.

pleted a considerable time before the St. Lawrence Canals are improved, it is even reasonable to anticipate that a certain amount of Canadian-bound grain will be trans-shipped at Ogdensburg from the largest carriers to vessels of canal size.

With a view to having Ogdensburg properly equipped when the new Welland Canal is completed, the Rutland Railroad has recently completed a rapid-handling marine elevator at that point. In planning a house to replace the elevator destroyed by fire in 1910, the railroad kept in view, the necessity of handling grain quickly and of arranging a plant which would be capable of extension.

The new elevator is at present of 500,000 bushels' capacity, but is so designed that additional storage capacity to any reasonable amount may be added. The elevator uses a portion of the pile foundation of the former house, additional piles being driven to take care of the additional load of a concrete building. The former power plant, reinforced by purchased electric power, is used to drive the new elevator.

The entire elevator is of reinforced concrete throughout, including marine tower, bins and car shipping house, with a structural concrete cupola, curtain walls, floors and roofs.

The marine leg has an unloading capacity of

18,000 bushels per hour on the dip and is provided with ship shovels and clean-up shovels operated by air. A 400-bushel hopper scale weighs the stream of grain from the marine leg. A 2,000-bushel hopper scale is used for shipping to cars and a second 400-bushel hopper scale for shipping to barges. Aside from the marine leg there is a loft, a shipping and a transfer leg.

Two car spouts are provided, giving the shipping house a loading capacity of from 60 to 80 cars per day. This is aided by good track room for loads and empties. The bins in the car loading elevator are rectangular; those in the storage portion of the building are cylindrical. The average size of the bins is small, to provide for a maximum number of small shipments for interior points. When the larger carriers come to Ogdensburg and additional storage is built, larger bins, similar to those in Buffalo and at Georgian Bay ports, will be constructed.

Mr. Thomas Callanan is superintendent of the elevator, having been in the service of the railroad in that capacity for many years. The new concrete elevator was designed and built by John S. Metcalf Company, Chicago and Montreal, who also designed and constructed the old wooden elevator which was erected in 1888.

price an hour hence is of more importance to him than would be knowledge of the probable price one month or three months hence.

The need, in the way of crop information, of these two radically dissimilar branches of the speculative grain trade leads to confusion as to what really constitutes crop reporting and what really is a crop report. On every trading day throughout the season an immense volume of more or less honest local opinion filters through brokers' offices and reaches the general public. News of most alarming character from one point, and of most gratifying prospects from another, anonymous or backed by names more or less well known, is thrown upon the screen of public intelligence by interested operators, and it all goes under the general title of crop reports. The weary market reporter, with space to fill and small power of discrimination, generalizes that crop reports were good and the market declined or that reports were bad and the market advanced. As a matter of fact such information bears no relation to crop reporting. Even if correct and unbiased it is merely the statement of a local situation that may or may not be of the slightest significance so far as the aggregate crop situation is concerned.

The distinction must be sharply drawn between the local crop message which tells of a situation in an indefinite but limited district, and a systematic crop report which taking into consideration the good and the bad alike, giving each a weight according to its relative importance, aims to present the average situation throughout the whole crop breadth. Frequently both are made by the same person, as during the crop season the crop expert visits the fields in search of personal knowledge, but that does not alter the fact that the local crop message is of small permanent importance and is not a crop report. It may furnish a reason for a temporary price change and thus serve the purpose of the market scalper, but it is of small importance to those whose interest lies in full knowledge of the general situation.

CROP ESTIMATES ARE NOT CROP STATISTICS.

While there is a disposition at times to disparage all crop reports, mainly because of the confusion in the mind of the critic between local crop messages and general crop reports, there is also frequently a tendency to reach the other extreme by expecting absolute accuracy in what by its very nature can only be an estimate. To regard crop estimates as crop statistics shows an entire lack of appreciation of what crop reports really are. Statistics are the tabulation of a series of definitely ascertained and recorded facts. A crop report is simply a tabulation of a large number of individual guesses, and must necessarily depend for its accuracy upon the average skill in judging results by appearance displayed by the individuals who furnish the primary guesses. To claim that such results are statistics is foolish. This definition of what constitutes a crop report applies equally to the official government report and to the few systematic private crop reports that are made, because both are the result of exactly the same system of procedure. What is sometimes called a crop report, but which is in fact merely an individual opinion based upon limited personal observation or deduced from the systematic report of some other authority, may be dismissed as of small value because in the one case the opportunity for personal observation furnishes too narrow a basis for broad generalization and in the other is merely a rehash or warming over of information which is always best presented by its author.

The value of final crop estimates does not lie in their absolute accuracy standing alone as the measure of a year's production. By such a standard the results might have small value though even by this standard sometimes striking results are shown. As an example of the possibility of actual as well as comparative accuracy, the writer after two months' careful scrutiny of the grain fields of Argentina last year, on Dec. 20, 1911, published an estimate of 65,000,000 bushels as the probable exports of oats from that country during 1912, and on Jan. 4, 1912, an estimate of 98,000,000 bushels as

Crop Reports and The Grain Trade

The Gathering and Distributing of Public and Private Information About the Crops—
Difference Between Estimates and Actual Statistics—Value of
Definite Advance Knowledge

By B. W. SNOW

Whether you realize it or not, your business, regardless of where or what it is, so long as it is a legitimate business of production or distribution, depends for its prosperity upon crop conditions. Good crops mean industrial and commercial activity in every direction; failure means business retrenchment, forced economy, a slowing down in all lines. Out of these two fundamentals has developed the modern science of crop reporting, for accuracy in forecasting and finally measuring the relative volume of crop production now fairly approaches the dignity of a science.

Every industrial or commercial campaign must be planned in advance. Hand to mouth production or distribution went out of fashion when means of general communication came in. The packer, the spinner, the grain handler, the railroad man, the wholesaler, jobber and retailer, must plan his activities in advance; must arrange what he is to do, not today and tomorrow, but a full season ahead. What he will do depends upon the volume of crop production and the consequent purchasing power of the country. The man best able to determine this in advance, is the man who furnishes the example of the survival of the fittest in the struggle for success.

Under modern facilities for inter-communication local crop conditions cut small figure, and knowledge that is confined to a local situation may be worse than no knowledge at all, in fact, be positively misleading. If a crop loss in one district is offset by a bumper crop in another, the man with full knowledge of both facts has every business advantage over his competitor who knows only of the failure or the plethora. Crop reporting is maintained for two basic reasons—first, to furnish foreknowledge of probable crop results with sufficient accuracy and promptness to justify the planning ahead of business campaigns, and second, in public reporting, to put all business competitors upon an equal footing in a knowledge of the essentials which will govern their future commitments.

There are fundamental classes of crop reports, public and private. Each has its own proper field of usefulness, and between the two there is no conflict. In fact one is the complement of the other, and it takes both, the public official work and the

systematic private effort, to furnish full and prompt and up-to-date knowledge of the crop situation. The official report, taking the work of the U. S. Department of Agriculture, typifies the public crop report. This report, though not necessarily the most accurate, is the final authority that controls the opinion of the grain trade upon crop prospects and final crop yields. It is issued at a fixed date and necessarily gives the crop situation as it appears on a given date, fixed at the first of the month. The legitimate function of the regular and systematic private report, prepared for public information, is to keep the trade and all interested in crop knowledge posted concerning the crop situation as it changes from day to day between the dates of the official government inquiry, and if the private work is faithfully done the facts disclosed by the official inquiry, however radical the change may have been during the month, are sufficiently appreciated in advance to prevent sudden and violent price fluctuations.

WHAT CONSTITUTES A CROP REPORT.

Superficial observers hold the opinion that it is the speculative grain trade that is interested in crop reports, and in fact that both public and private reporting is maintained for the benefit of this part of the trade. This is a mistaken view. To fully understand the facts it is necessary to make clear the line of distinction that exists in the grain trade between the speculator and the scalper. The former carefully studies the factors governing supply and demand and upon his conclusion as to the probable course of future prices based upon these legitimate factors predicates his market commitments. He wants exactly the same information and for exactly the same reason as does the commercial and industrial community, in order that he may intelligently plan his business in advance. This portion of the speculative grain trade, which combines in its operations some of the functions of the merchant and some of the banker in distributing the grain crops, is interested vitally in accurate crop foreknowledge. The other less important but more showy portion of the speculative trade, the scalper, who is interested in daily market fluctuations rather than in the final future price level has small interest in accurate crop reporting. The

The Romance of Grain

A History of Grain and the Grain Trade of the World, from Remote Ages

By JOHN MCGOVERN.

Author of "The Fireside University," "Hospitality," "Paints and Pigments," "Trees," "An Empire of Information," Etc.

IV. THE CEREALS.

DE CANDOLLE.

The chief authority of the nineteenth century on cereal grasses was De Candolle (a Frenchman, like Rousseau and Pictet, born at Geneva, Switzerland). He seems to have established the view not overthrown by modern ethnologists, that Wheat and Barley attracted the attention of early Man as the plants grew wild in Mesopotamia, somewhere just outside of the prodigious forest that stretched across the Asiatic and European continent. The ethnologists think that Woman was the first Wheat farmer.

BARLEY.

Where the paleontologists believe that the earth cooled first at the poles, and that life had its origin at points far from the equator, Barley is regarded as the most ancient (as it is the hardiest) of the cereals that form an aliment of mankind. The Stone Age men of antiquity had three varieties, which are found in the remains of their lake dwellings. One of these varieties is the common small six-rowed; and that common kind, too, was the sacred Barley of the Greeks. Its ears were represented in the hair of the Goddess Ceres (the "corn-mother"), and appear on ancient coins. Proserpine, the daughter of Ceres, who went into the underworld and was gone a third of a year before she rejoined her mother, is interpreted by some to mean Barley.

Barley is the grain of the Nomads, and we see it in the pots of the Khirgis, Yakuts and the horse, dog and reindeer Tunguses of Siberia.

Americans have known Barley mainly through

dwellings of Switzerland. But Rye has been discovered in association with weapons of bronze at Olmütz, Germany. There is no special word for Rye in Sanscrit, Chinese, or Arabic. The Romans gave it the name of *Secale*.

The modern Rye crop of Russia is prodigious, going over 850,000,000 bushels, with Germany half as much, and the Austro-Hungarian Empire a third.

OATS.

We never use the word in the singular (Oat) as the English do. De Candolle concludes that Oats were not cultivated by the Egyptians, Hebrews, Greeks, or Romans. Pliny (Roman) in his Natural History (encyclopedia) tells of oat-meal cakes eaten by the Germans. Galen (Roman doctor) observes that Oats grew in Asia Minor, and were used for human as well as for animal food. Mohammed Ali introduced Oats into Egypt for fodder, but Bruce saw the plant growing wild in Abyssinia. Eastward of Syria, Bruce heard Oats called *Sulu* (by the Tartars). Kaempfer saw the plant in Japan. Pickering chronicled that the colonists brought Oats to the New England plantations, and it has been naturalized in South America.

The increase of the crop in the United States, despite the coming of the automobile, is one of the miracles of modern times, and the growing importance of Oats as a human food was foreseen only by the wisest and most hopeful of the prophets of the Board of Trade.

It may be said of the once super-famous Dr. Samuel Johnson, that he underestimated Shakespeare, greatest of Englishmen, Rousseau, greatest of Frenchmen, and Oats, one of the greatest of the cereals. In his dictionary, at the word *Oat*, he defined the thing as a grain given for food to horses in civilized countries, and to human beings in Scotland.

RICE.

As Wheat stood to Egypt, so Rice was related to all hot and temperate countries east of Afghanistan. It is not mentioned in the Bible, but the Hebrews wrote of it and were familiar with it. The Rice plant is an annual grass. As there is winter and spring Wheat, so there is Rice for marshy soil, and Rice that will grow on hill sides.

The accredited records of China, as restored, reach back to B. C. 2205. There are traditions that an Emperor B. C. 2800 instituted the ceremonial in accordance with which the Emperor himself sowed the seed, and this continued to the time of the republic. De Candolle seems to have erroneously located the first Rice in China, for the Australian continent has an indigenous kind. Rice is also indigenous to India.

Previous to the Open Door in China (practically beginning with the close of the nineteenth century) a traveler visiting the people of the world, over the more easily covered routes, ate bread or cakes of Wheat, Corn, Rye, Barley, Millet, or Oats, from San Francisco to Bombay. From Bombay, till he left Yokohama and the Philippines, he ate Rice. The Japanese *saké* (strong liquor) is distilled from Rice.

"Rice," says Quintin Craufurd, the friend of both Marie Antoinette and Josephine, who, like the Abbe Raynal, knew a great deal about India. "Rice sprouts into far more varieties than any of the corns (grains) familiar to Europeans, for some varieties grow on the water and some on dry land; some come to maturity in three months, while others take four and six months to do so. The Hindus, however, are not contented with such distinctions as might be derived from these obvious sources, but have names for varieties the distinctions between which are inappreciable by Europeans; besides terms for this corn founded on variety, on season, and on mode of culture, the grain itself bears one name in the straw, another

the probable wheat exports for the same period. The actual exports finally proved to be 64,000,000 bushels of oats and 100,000,000 bushels of wheat.

As a general proposition, however, the value of crop estimates is comparative rather than actual. It is of small practical importance whether a crop this year is one billion or two billion bushels; the important thing is to know whether it is 25 per cent larger or 15 per cent smaller than that of last year, because with that knowledge the effect upon supply and distribution may be readily gauged. For this reason it is of small moment, and in no way affects the value of such reports, if the estimate for a census year is proven seriously wrong when the results of the enumeration are published two or three years later, provided the percentage of error is approximately the same in preceding and succeeding years. In such a case the comparative value is there though actual accuracy may be lacking.

The crop-killer is an object of derision and his work a joke, but he bears only the same relation to the legitimate crop reporter that the fakir does to the medical profession or the shyster to the legal. The man interested in crop foreknowledge has no more difficulty in detecting the charlatan than he has in distinguishing between the local crop message and the systematic crop report. To secure accurate and general crop information for individual use would entail an expense beyond the means of the ordinary business man, but the official crop report supplemented by the reliable private crop reports places all interests upon a common and equal footing so far as this essential knowledge is concerned.

ON CAPE COD

The picture looks something like "Out West." But it wasn't made in that section at all; rather the sky is that of "Down East," and the land is that of old Cape Cod—the "land of the sacred cod" and the home of the cranberry of commerce and the



ELEVATOR OF JOHN HINCKLEY & SON, YARMOUTHPORT, MASS.

joy of Thanksgiving. Everything is well built, substantial, permanent, as befits a country that has settled down to the permanent things in life and business.

The elevator, and this appeals to us most, was built by the owners, John Hinckley & Son, Yarmouthport, Mass., but from plans made by competent elevator designers and outfitters in Boston. It is 55 feet high and will hold from 10,000 to 12,000 bushels of loose grain and there is further storage room for eight to nine cars of bagged stuff on the main floor, making it the largest elevator, perhaps, on Cape Cod. There are four bins with spouting to the first floor for bagging purposes. The grain is elevated by gasoline power, a 25-horsepower engine being used, with which the owners operate also a small planing and saw mill in connection with their business in lumber and other building materials. The railway track in the foreground is that of the New York, New Haven & Hartford Railroad.

its connection with the malt liquors. The Egyptian so used it, and drank much beer.

WHEAT.

Wheat, the history of which is so intimately connected with the grain trade of the world, is the most important and the most generally diffused of cereal grasses. That is, no other one grass now grows so widely on the world's surface. It is found copiously in the Egyptian tombs. The pictures on ancient coins show a bearded Wheat, but pictures much earlier than any coin reproduce an ear of Wheat without beard, similar to the "Mediterranean Wheat" so long known in America. (See anon, Egypt.)

RYE.

This cereal, so important in climates a little too rigorous for Wheat, seems to have originated between the Black and Caspian Seas, or on their northern shores, but it does not rank in antiquity with Wheat. De Candolle could find no traces of Rye on the Egyptian monuments, or in the lake

when threshed, one name in the husk, and another when freed from it, and a fifth when cooked. A similar abundance of terms is found in the languages of the Malay and Philippine Islands."

Rice is fitted, by its relatively smaller quantity of nitrogen, for food in countries of excessive heat. In temperate climates it should be, and is, mixed with milk or meat, to satisfy the human appetite.

Louisiana and Texas are our great Rice-growing areas, and the United States is producing about 6 per cent of the world's crop.

CORN.

America receives its language from England, but striking variations have evolved, and none more noticeable than in the use of the word "Corn." In England and its outlands, "Corn" stands for the chief local cereal—the grain—be it Wheat, Rye, Oats, or Rice—the main "bread-timber." In Scotland Oats are "Corn." All English books, including the Bible, must be so read—"Corn," of course, usually meaning Wheat. What Americans call "Corn," the English name Maize, often saying "Indian Maize." This word was carried in the form of *Mahis* from Hayti by the Spanish, according to the Spanish and French writers, who declare that "Turkish wheat" and "Spanish wheat" have always been misnomers. In these chapters "Corn" (when not used in quotation from an "English" writer) will mean Indian Maize. "*Quern*" and "*Kern*," the hand-mill of the Stone Ages, is the same word, and where classes of men have taken the word (as in "Macbeth") we may guess they were originally farm-workers of a low degree.

As the Spanish fathers and the American colonists found Indian Maize (Corn) to be the most common grain raised by the Indians (adapted as it is to the continental rigors of our climate), the generic name of grain, "Corn" was attached to it by their translators, and that name is not entirely likely to give way, notwithstanding the growing influence of English locations, fashions, and manners.

MILLET.

There remains to be noted a cereal, or rather a class of cereals, all called Millet, that figure most prominently in India, Africa, Southern Europe, and elsewhere, and were cultivated in antiquity. The ancient Millet (*Panicum*) belongs to a genus that reckons 850 species.

The great Broom-Corn, a close relative of King Corn himself, is the most important grain of the dry regions of Africa, Arabia, Persia, India, Far India, Italy, Spain, etc. It is the *sorghum vulgare*. It is bitter in Africa, in protection against the birds, and is called Dhurra. At Cape of Good Hope it is Kaffir Corn. In West Africa it is Guinea Corn. The Bengalese call it *Jowari*. In Tamil (Ceylon, Madras, etc.) it is *Cholum*. The common European idea that American Corn (Maize) was Turkish Corn (Millet) came naturally. The species called Kaffir Corn is the same one that the Chinese cultivated into our own Sorghum.

The ancient Millet was cultivated from Elam to Saul, and its name of *Panicum* hints strongly of bread. It was a long, slim, long-headed grass. Hippocrates (Greek), the father of medicine, dealt with it in his book "On Regimen." Theophrastus (Greek) also testified that in his day the plant had come from the East and was grown in Southern Europe to the eastward of Greece. Pliny, in calling it *Asia*, noted its eastern origin.

In the time of the later Egyptian Empire, the Dhurra was not threshed, but was removed with an instrument like a comb. There is a picture of an old man sitting in the shade of a tree, and engaged in stripping the ears of Dhurra with this tool. He says to the peasant who brings him sheaves: "If you bring me eleven hundred and nine, I will comb them all." The proprietor observes: "Make haste and do not talk so much, thou eldest of the field-workers!" "Eldest" here hints at the garrulity that sometimes accompanies old age.

SOME ANCIENT NAMES.

Fosbroke copies the following list of names from Monsieur Pauton:

BEARDED WHEAT—*Triticum*, *Opuros*, *Far*.
UNBEARDED WHEAT—*Siligo*, *Silignis*.

RICE—*Oryza*, *Zea*, *Eder*, *Ador*, *Adoreum*, *Faracinea*, *Sandalum*, *Halicastrum*, *Semen*, *Olyra*, *Tipha*, *Bromes*, *Zizelia*, *Tragos*.

COMMON BARLEY—*Hordeum*, *Hexastichum*, or *Cantherinum*.

OATS—*Avena*.

RYE—*Asia* (Pliny so calls it.)

MILLET—*Millium*, *Panicum*.

THE BIBLE.

In the Bible concordances, consult the words *Corn*, *Wheat*, *Barley*, *Harvest*, and *Merchant*.
(To be continued.)

THE MAKING OF A CORN SHOW
ENTHUSIAST

Not every grain dealer commences his career upon a farm, but it has been said more than once that farm life constitutes a sure foundation for success. Moreover, the grain dealer who was once a farmer boy, in the majority of instances, becomes interested in the question of better crops long before his associates in the same line have awakened to the fact that this is a live and vital issue. An example of this is D. R. Risser of Vaughnsville, Ohio.

Mr. Risser was born on his father's farm in Put-



D. R. RISSE AT OHIO STATE CORN SHOW

nam County, Ohio, and spent his boyhood days there, working hard as all farmers' sons must do. However, he utilized every opportunity to learn other things besides agriculture, attending country school and later a business college. Then at the age of 27 years, after he had saved by labor on the farm the sum of \$700, Mr. Risser started in the grain business at Vaughnsville.

His first experience was somewhat disastrous, for he lost considerable money on the initial shipment of grain. Although this would have discouraged a great many individuals, it did not daunt Mr. Risser, who kept plugging away until his small original capital began to increase by jumps and bounds, and today he is recognized as one of the leading grain dealers of the section where he lives, owning three elevators and having an interest in two others.

Coincident with his rise in the grain business he began to take an active interest in improved farming. He now has several farms in Ohio, one being located about two miles out of Vaughnsville. Here he has installed the most modern agricultural buildings and equipment.

At an early date recognizing that farming should be conducted along scientific lines, Mr. Risser became interested in agricultural experiment work, particularly with reference to the improvement of the grain crop. He not only put in practice ad-

vanced ideas on his own farms, but encouraged other farmers in his section to select and sow better grain. Then the corn shows began to appear, and he took an active part in these shows, demonstrating at them the importance of selecting good seed corn and applying the germination test.

The accompanying illustration shows Mr. Risser demonstrating at the Ohio State Corn Show recently held at Lima, Ohio. He also attends farmers' institutes throughout his section, giving talks on improved grain. Lately he organized and helped to carry to a successful conclusion, a local corn show in his own town of Vaughnsville. Since his interest in crop improvements is not only that of an ordinary enthusiast, but a practical grain producer and dealer, his influence is productive of much good results.

THE KEYSTONE ELEVATOR DECISION

For several years the relations of the Keystone Elevator and Warehouse Company of Philadelphia with the Pennsylvania Railroad have been under investigation by the Interstate Commerce Commission. Charges were preferred by several grain dealers in the Philadelphia Commercial Exchange that the railroad was discriminating in favor of the property of stockholders of the elevator company.

In a decision made public during the past month the payment of allowances by the Pennsylvania Railroad Company to the Keystone Elevator and Warehouse Company was ordered discontinued and further sets forth that the property must not be leased under the same conditions that prevailed at the time the investigation was commenced. The decision in full, designated Order No. 3372, reads as follows:

This proceeding having been instituted by the Commission on its own motion, and full investigation of the matters and things involved having been had, and the Commission having, on the date hereof, made and filed a report containing its conclusions thereon, which said report is made a part hereof:

It is ordered, that respondent, the Pennsylvania Railroad Company, be and it is hereby notified and required to cease and desist, on or before March 15, 1913, and for a period of two years thereafter abstain from leasing a certain grain elevator property located at North Philadelphia, Pa., known as the Keystone Elevator, to the Keystone Elevator & Warehouse Company so long as the stockholders of the said Keystone Elevator & Warehouse Company are owners wholly or in part of the property passing through such elevator, as such leasing under such circumstances is found in said report to result in unjust discrimination, in violation of the act to regulate commerce.

It is further ordered, that said respondent be, and it is hereby, notified and required to cease and desist, on or before March 15, 1913, and for a period of two years thereafter abstain from paying any allowance for terminal services to the Keystone Elevator & Warehouse Company upon any property passing through the grain elevator located at North Philadelphia, Pa., known as the Keystone elevator, belonging wholly or in part to any stockholder of said Keystone Elevator & Warehouse Company, unless said respondent's published tariff shall at the same time offer such allowance to all other shippers using said or any other elevator in the city of Philadelphia, Pa., as the practice condemned herein is found in said report to result in unjust discrimination, in violation of the act to regulate commerce.

JOHN H. MARBLE, Secretary.

The original charges involved the firm of L. F. Miller & Sons, it being claimed that the allowances made by the Pennsylvania Railroad formed a rebate and allowed this company to undersell all other grain men. It was further set forth that the railroad permitted the elevator to be leased at a sum greatly below what the rental of such a property should be.

The decision of the Interstate Commerce Commission is interpreted by many newspapers as meaning that the railroad must cancel the lease of the Keystone Elevator and Warehouse Company. As a matter of fact the perusal of the order shows that it does not indicate anything of the kind. The main purport of the decisions is directed against anyone being engaged in the grain business and at the same time being a stockholder in the elevator company.

The present head of the Keystone Elevator and Warehouse Company, Harvey C. Miller, in a statement recently given out says that although he was originally a member of the firm of L. F. Miller & Sons, he withdrew from that connection on Feb-

ruary 1, 1912, and since that date no member of the firm has been a stockholder in the elevator company. At the same time a complete reorganization of the Keystone Elevator Company was effected so that the elevator has been and now is operated in strict compliance with the order of the Commission. It is said that the Keystone Elevator will be continued on the same management as heretofore.

GRAIN ELEVATOR CONSTRUCTION IN RUSSIA

The completion at a cost of \$500,000 of a large grain elevator at Griazy station of the Southeastern Railway in Russia, marks the government's initial step in building a network of granaries throughout the Russian Empire for promoting agriculture and trade, the same being financed by the State Bank. This is reported by Consul General Snodgrass of Moscow, who says that the government's attention to the necessity for storage places for the nation's wheat was directed by a group of Americans some two years ago, who endeavored but failed to arrange for a concession for their construction.

The elevator at Griazy has been built according to the American system, and with rapidity, the construction having only been begun in May, 1912. About 2,000 workmen, under five engineers, worked day and night. The elevator is built in the "Empire" style, the central part being 157 feet high of iron-concrete. The inner arrangement is such that not the smallest space remains unutilized. The loaded railway cars are brought inside the building and the grain run into large receptacles, whence it is carried by eight lifts to the highest floor.

The handling capacity is about 270 tons per hour. The four top floors are for cleaning and storage; open spaces pass through all floors, which promote ventilation and make it possible to control the work on all four floors. From the top floor the grain passing through separators and filters, gravitates to the next floor, which contains a number of scales; after being weighed it drops to the next floor containing additional cleaning apparatus, whence it goes by special tubes to separate bins, some of which are of iron-concrete, while others have wooden walls. They number 192, and are calculated to hold 30,000 tons of grain.

The power house has two 120-horsepower engines, two electric generators, and dynamos for lighting the whole building. The elevator is equipped with electric signalization, speaking tubes and telephones.

The question of building elevators by the Government Bank was first brought up two years ago. The board concluded that their erection was desirable, as such granaries would improve grain trade conditions and create facilities for loans on grain.

The Council of Ministers, to whom the matter was presented November 25, 1910, by the minister of finance, also favored the measure and resolved that the Government Bank should gather complete information. Thereupon the Government Bank held a conference at which the minister of finance was present. It was decided to restrict the building operations at present to eight provinces in the southeast. Local conferences were then held from March to June, 1911, in the eight provinces, and the committees proposed constructing 178 granaries, of which 125 were to be built near railroad stations, 29 on wharves and 24 in other places. This construction work is now going on, the Griazy elevator being the first one completed.

Brazil is looming up as another competitor of the United States and Canada in the world's wheat market. It has been discovered that wheat can be cultivated with advantage in nearly all the states of Brazil. A propaganda has been instituted by the minister of agriculture for the cultivation of wheat. The beginning was in the state of Rio Grande do Sul. The production of wheat, which in 1909 did not exceed 15,000 tons, was 30,000 tons in 1910, and since 1911 has far exceeded the latter figure. In 1912 the number of wheat growers increased and vast areas have been prepared for plantations in 1913.

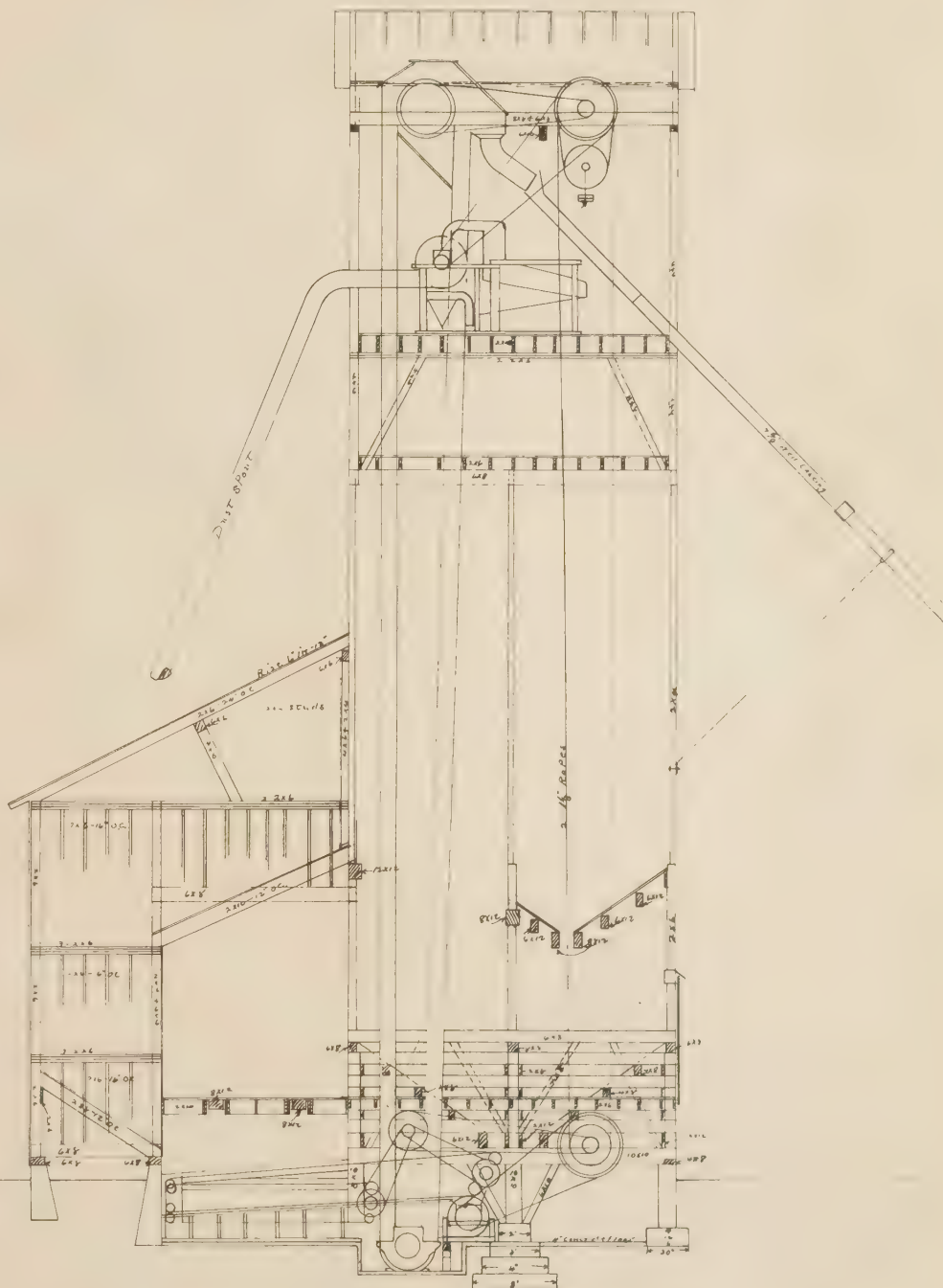
Plans for a Country Elevator

An Indiana Elevator of Moderate Size Recently Erected Which Embodies the Latest Ideas of Construction.

A longitudinal section of a new grain elevator which was completed in December of last year for the Cates Grain Company of Cates, Ind., is shown below. This firm was recently organized to engage in the buying and shipping of grain at Cates, and placed the contract for their elevator with the Reliance Construction Company of Indianapolis.

The plan shows an elevator constructed upon the most modern and up-to-date basis. It was designed

ing is shown by the plan but also the arrangement of the elevators and pulleys. Full details of the rope transmission are plainly depicted and the whole plan if carefully studied furnishes an accurate idea of modern country elevator construction. The dust spout is located on the left, leading from the dust collector, while the spout on the right which is shown cut off, extends all the way to the car level.



LONGITUDINAL PLAN OF ELEVATOR OF CATES GRAIN COMPANY, CATES, IND.

with special reference to ease and economy of operation for which the elevators erected by the Reliance Construction Company are noted.

The elevator has a capacity of 15,000 bushels small grain and 2,000 bushels ear corn with handling capacity of 8,000 bushels daily. It is of cribbed construction covered with galvanized iron.

The machinery equipment consists of one stand of elevator legs, one Western Sheller and Cleaner, one automatic scale, one manlift, and Fairbanks-Morse Gasoline Engine. The elevating and transmission machinery was furnished by the Union Iron Works of Decatur.

Not only the general construction and floor spac-

The elevator is 32 feet wide by 40 feet long and has a total height of 70 feet. Since its erection the Cates Grain Company have reported that a most flourishing business is being done.

The state of North Dakota may build or lease a grain elevator on Lake Superior, it is reported. Under a constitutional amendment passed at the last election the state has the right to appropriate money for that purpose and this gives rise to the rumor that an elevator may be erected. It is said that the state will appropriate money for such a project at Superior, Duluth or another convenient point.

Gas as Fuel in Small Grain-Drying Plant

A Discussion of Grain-Drying from the Standpoint of Economy—Reasons Why Gas Is the Logical Fuel for Small Plants—Lessons to Be Learned from a Louisville Installation

By G. D. CRAIN, JR.

The practical necessity, in comparatively small grain and mill-feed establishments, of drying some of the moisture out of matter which is received in a condition which makes early heating, and consequent deterioration, probable unless some such step is taken, is obstructed at the outset by the expense of the process. This, in a good many cases, has caused small dealers to turn over to the big concerns their work of this sort, as they prefer to pay a fixed charge for drying rather than to incur the expense of installing their own plants.

The principal item of expense in these small plants, naturally, consists in the almost constant supervision which is necessary, for inasmuch as a pressure of something like fifty pounds must be reached in order for good results to be obtained in the drying machine, a good fire must be kept up. On the other hand, when the point indicated is attained, it then becomes desirable to keep the heat and the consequent steam pressure from going much higher, lest the dryer have too high a temperature.

Then, too, in order to be able to operate the dryer at frequent intervals, if necessary, a fire should be kept under the boiler nearly all the time, as the difficulty of starting a fire all over again, after permitting it to go out, and getting up steam anew, would not render the latter plan desirable. All of these requirements indicate, as stated, that almost constant supervision, by a man employed practically only for that purpose, is necessary where a boiler heated by coal is employed in the operation of a drying plant, no matter how small. This is an added item of expense which is quite prohibitive to the owner of the small grain and feed business.

Those who have found it necessary to dry grain, either whole or cracked, and yet have been loath to make the investment required for the operation of a drying plant, may learn something from the plan followed by a well-known firm in Louisville, Ky. The firm had run a Cutler Dryer, of the usual type, for some time, supplying it with steam from a boiler heated by coal. The boiler, with its fire-box, of course required the intermittent services and attention of a man who acted as fireman and engineer.

Since the dryer was only operated for a few hours a day, a fair accumulation of stuff being awaited before starting it, the firm found the employment of a special man for this particular work an undue burden, and an item of expense which it seemed ought to be eliminated, if possible; but as it was a practical necessity in the business, to dry a good deal of the grain and feed stuff which the concern handled, it was entirely out of the question to dispense with the dryer.

The proximity of a number of distilleries furnishes this firm, as well as others in the feed business in that city, with a variety of material not common to other localities. It consists of the soft parts of the corn, which are separated from the rest of the grain by a bolting process, the corn being cracked for this purpose, in order that only those parts of the grain which contain the starchy constituents may be put into the mash for the manufacture of whiskey.

This by-product, which has a food value for cattle equal almost to that of cornmeal, is known as corn-bran; and being soft and light, and peculiarly susceptible to moisture, frequently comes to the dealer about ready to heat. The remedy for this symptom in corn-bran, as well as other varieties of feed, cracked grain, and whole grain, is prompt and thorough drying, after which it will keep indefinitely without deterioration, unless, of course,

it should come in contact with water, and becomes actually wet.

A dryer, therefore, is a matter of daily necessity with those firms which handle feeds likely to heat—and that means nearly all of them. The concern in question did not for a moment contemplate giving up its drying plant. Its mechanical operation, moreover, was economical, as it was belted to a shaft which conveyed power from a little steam plant nearby for the use of the several mills used by the firm in cracking grain for the manufacture of feed. The only real problem was the production of the superheated steam which furnished the heat in the coils of the dryer's revolving cylinder, by means of which the grain or feed was dried.

It finally occurred to one of the firm that it might be possible to use gas for this purpose; and a consultation with the representatives of one of the local gas companies confirmed this surmise emphatically. The gas-man pointed out several things showing that gas was the ideal fuel for such a purpose, among them being its absolute controllability, and the fact that, on account of this ease of control, a thermostat arrangement could be attached to the boilers used which would automatically regulate the temperature at any point desired, so that it would be impossible for the steam to become too hot for the purposes of the dryer.

An installation was therefore arranged by the gas company, consisting of two 10 to 12-gallon boilers, each heated by a gas burner from beneath, and connected up so that the steam passed from both into a pipe which conducted it into the coils of the cylinder or drum of the machine. As usual on this type of dryer, the condensed steam was carried by a pipe directly back to the boilers, so that a constant supply of hot water rendered the fuel to be used in keeping the water and steam up to the proper temperature the lowest possible amount.

The thermostat was adjusted at a temperature of 220 degrees, the device operating to shut off the gas current when this point was reached. On a trial, without any grain in the trough, the new attachment was found to operate perfectly, apparently; but there was some trouble discovered when it was attempted to dry the usual quantity of wet feed stuff. There was no difficulty whatever in getting the steam up to the proper point; but when the operation of the cylinder began, it was invariably found that the steam fell below a point where effective drying could be accomplished. Obviously, the trouble lay in an inadequate boiler capacity.

The boilers were too small to supply enough steam to keep the cylinder hot enough to dry the required quantity of feed or grain; that was the difficulty. And at the same time, the size of boiler indicated was the largest that could be used with the ordinary type of burner, as the surface presented by a larger boiler would be so large that it would not heat. The addition of another boiler, or possibly of two more, is expected to remedy the trouble, and result in an adequate supply of steam at all times at the required temperature, in order to accomplish the requisite drying.

A factor, which probably was partly accountable for the inability of the little boilers to keep the steam up to the required temperature during operations, was the faulty location of the drying plant, and especially of the boilers themselves. The plant is placed at one end of the firm's big warehouse, which is naturally a somewhat airy building, especially in winter. During most of the time the big double doors, which are only a few feet from the

boilers, are wide open, to permit of the easy ingress and egress of teams with their loads.

As a consequence which might have been easily foreseen, the extent of the cooling of the boilers by radiation—by the coldness of the surrounding air, in other words—prevented them from exercising their full efficiency in the heating of the steam. This, at least, is the somewhat logical inference of the gas company's engineer, who installed the little plant. In deference to this view, the firm plans either the removal of the drying plant to a more sheltered corner, or the erection of a shelter around it, so as to keep off at least the worst of the direct currents of cold air.

There is no question, however, but what with proper arrangement of the plant, and adequate boiler capacity as well, the use of gas as a fuel for the heat supply of such a plant will be eminently successful. Furthermore, the advantages of gas, as pointed out above, are such that it can be left entirely to the automatic regulation of the thermostat attachment, once it is lighted and the boilers filled. Consequently the man who handles the sacking of the dried grain or feed as it comes from the machine is able to give the boilers all the attention they require.

Wherever this kind of fuel is available, therefore, there is no reason why any grain and feed dealer who can afford the initial investment required for the dryer itself, should not have one in his warehouse, for use in the proper handling of the numerous varieties of mill feed which are handled by the trade. The advantage of being able to keep stuff on hand properly dried, with the knowledge that it will not deteriorate, and of being able to sell it with a corresponding guarantee to the purchaser, is a considerable one. It would probably be worth the small dealer's time to investigate the matter, if there is a gas plant in his town, with a view to doing his own drying.

FOUNDATIONS FOR WAGON SCALES

Although often given little thought, the foundations for wagon scales are of the utmost importance. The different materials used in making scale foundations will vary according to location, says the *Coal Dealer*. Foundations may be brick, stone, concrete, cement or plank.

Brick makes a good foundation if it is built thick enough so the frost will not cave it in, but the opinion of scale men seems to be that concrete is the best, although some have found that even cement foundations have not always given satisfaction. This is true in some cases where a scale is hung in the cement frame. The cement walls should not be less than 16 inches thick, for if the wall is too thin there is danger of the frost breaking it. The same is true of a stone wall unless it is 18 or 20 inches thick. Stone laid in cement mortar will last a lifetime. Stone laid in lime mortar, five or ten years.

It takes about one and a half cords of stone and about two loads of sand and two barrels of lime for a stone foundation, while for a cement foundation it takes ten to twelve yards of sand and gravel to twenty-five or thirty sacks of cement for a foundation 16 inches thick and five feet deep.

Some places sand can be had for 75 cents per load; again in other towns, sand costs about \$3 per load. This is sometimes the hardest item to get. It is estimated that about 2,000 bricks are required for a brick foundation, and the cost of same depends altogether on the price of the brick and other material needed.

All wagon scales should have an independent foundation. A scale 8x14 with concrete foundation should have a wall 16 inches thick and a pit 4 to 5 feet deep, 16 feet 8 inches long by 12 feet 8 inches wide. This is outside measure. Hopper scales should have larger foundation for the larger size scale (scales vary from 8x14 feet to 10x22 feet) and piers for the smaller size scale. All square frames should be the exact size of that called for when placed on foundation and should be perfectly square so that the levers will hang plumb and level. It takes from three to five days to excavate

and put in a foundation for scale, but a concrete foundation put in with care will last a lifetime.

When the foundation is laid and scale hung, in place of the 3-10 bearing plank, take a strip of prepared roofing the length of the bearing plank and four inches wider so as to lap over two inches on either side of plank, put on the timbers and joist, covering each with roofing same as bearing plank, then put the flooring plank on. This roofing protects the timbers from the rain, keeping them dry, and they will last much longer. Then by tacking an old six-inch rubber belt on the scale frame, letting it lap, say, two or three inches over on platform, covering the crack between frame and platform, which will keep out the dirt and snow.

Another important point is a proper drain pit leading from the scale. Without drain the pit is simply a muck-hole. Such pits not only tend to rot out the scale foundation but are a continuous source of vapors that rust the bearings and iron portions of the mechanism and reduce the accuracy of the scale. Rust is the most fatal and general of scale diseases, and it is no respecter of quality, the high priced standard makes being ruined as quickly by it as the inferior and less accurate scales.

The best results are obtained where the approaches are level with the platform, as with the horses standing up or down there is more or less of a pull on the scales. There should be provision for a manhole either in the platform of the scale or at the end so that the scale pit may be easily accessible. A few minutes each week in keeping the pit clean is time well spent, for nine-tenths of the scale troubles even after the scale is well built is from dirt alone.

Cost of resetting an old set of scales on a new foundation, or installing a new set of scales on a new foundation will vary materially, according to location, nature of soil, depth of pit and thickness of wall necessary to prevent cracking by frost, the cost of lime, cement, sand and other material, as well as the cost of common labor. Good foundations have been built from \$125 to \$150, while at other points the cost of the same work of resetting an old set of scales or installing a new set of scales on a new foundation will run as high as \$225, irrespective of the original cost of the scale.

COTTON BAGS TO BE USED

Arrangements have recently been made for the purchase of 10,000,000 cotton sacks from factories in the south by the producers of Oregon, Washington and Idaho. These bags will be used for grain instead of the jute sacks formerly employed. Several representatives of the Farmers' Union made an extended trip through the southern states visiting large cotton bag factories for the purpose of making necessary arrangements to purchase a large quantity of bags for June delivery.

It is said that two cotton bags can be bought for the price of one jute sack. Of course it will be necessary to buy from a large number of factories on account of the great number of sacks that will be required. At Nashville they will be able to buy about 2,000,000 sacks, at Atlanta another million, and similar amounts from other points throughout the south. The cotton bags are said to be not only cheaper, but they are lighter and more durable as well. The great hauling distance will be discounted by the fact that the southern product is less than half the weight of the jute sacks made in the West.

Figuring the membership of the Farmers' Union in the three northwest states as 10,000 and the average crop at about 60,000,000 bushels, the change from jute to cotton bags will involve the saving of a good many thousand dollars.

Practically all the vessels in the harbor at Fort William have been loaded owing to the government keeping the harbor open after navigation had closed. Sixty vessels are reported ready for the first breaking of the ice with 13,000,000 bushels of grain in their holds.

The Standardization of Grain Grades

Conditions Which Should Result from a Uniform System of Inspection and Grading—
Work Now Being Done by Government—Immense Loss from Deterioration
—Why the Grain Dealers Are at Fault

By DR. J. W. T. DUVEL

Crop Technologist in Charge of Grain Standardization, U. S. Dept. of Agriculture.*

In the grain standardization investigations of the U. S. Department of Agriculture a comprehensive study is being made of the methods of harvesting, handling, storing, transporting, and grading of grain with the view of reducing to a minimum the enormous losses now resulting from the deterioration which takes place after the grain is ready to harvest and before it reaches the final consumer or manufacturer. Likewise, it is desired to bring about a uniform and definite system of inspecting and grading of grain on the basis of its intrinsic value so that the producers will have a greater incentive to grow and market grain of better qual-

majority of the large markets. While our investigations show that the rules for grades of the National Association are not as specific or as rigid as they should be in many instances, it is likewise conceded that if the rules were lived up to by the markets that have adopted them, the present universal demand for Federal standards would probably be less powerful.

ENORMOUS LOSSES RESULTING FROM DETERIORATION.

The enormous losses resulting from the deterioration of corn after it is harvested or marketed are due to *excessive moisture*. Excessive moisture, on the other hand, may be attributed to two groups of causes. The one originating on the farm and the other with the grain dealers. In the first case our investigations have shown that a very high percentage of the corn of commerce is in an unfit condition for marketing when it leaves the farm. Unfit because of the poor methods of harvesting, handling and storing or because of the production of large late maturing varieties, many of which are heavy yielders simply because they contain a high percentage of moisture.

The importance of the factor of moisture is brought out more clearly in the accompanying table, showing the comparative yields per acre of corn containing 12, 16, 19, 22, 25 and 28 per cent of moisture:

TABLE.

Dry	Moisture Content and Intrinsic Value per Bushel.		Dry		Dry	
corn.	No. 2	No. 3	corn.	No. 4	Sample.	Grades.
12%	16%	19%	22%	25%	28%	
55c	52½c	50½c	48½c	46¾c	45c	
Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	
40	41.9	43.5	45.1	46.9	48.9	
50	52.4	54.3	56.4	58.7	61.1	
60	62.9	65.2	68.0	70.4	73.3	
70	73.3	76.1	79.0	82.1	85.5	
80	83.8	86.9	90.3	93.9	97.7	
90	94.3	97.8	101.5	105.6	110.0	
100	104.8	108.7	112.8	117.3	122.2	
110	115.2	119.5	124.1	129.1	134.9	
120	125.7	130.3	135.4	140.8	146.5	

In this table, 12 per cent has been taken as the basis, because old, well cured ear corn usually contains about 12 per cent of moisture during the latter part of the summer when the farmers dispose



ONE OF THE REASONS WHY SO MUCH CORN IS GRADED NO. 4, OR REJECTED

ity. In order that definite grades might be fixed with equal justice to producer, dealer and consumer, it has been necessary to study the harvesting and storing of grain on the farm; the handling, storing and grading of grain at country points and at the larger markets; the deterioration of different grades of grain during shipment in cars between various points in the United States and in steamships in transit from our export markets to various European ports; and such other problems of a similar character which play an important part in determining the commercial grade or value of any given lot of grain when marketed. In connection with these investigations attention is also being given to the various factors which must be taken into consideration in grading, and to the development and standardization of suitable apparatus and methods for accurately measuring those factors of most importance.

During the comparatively short time that this work has been in progress it has not been possible to cover thoroughly all of the grains. Up to the present time our investigations have been confined very largely to corn. Even this part of the work is far from complete in all its phases. However, we now have sufficient data available to justify the fixing of definite grades for corn and it is proposed to establish such standards during the coming season, these standards to be available for the inspection and grading of the 1913 crop. It perhaps would be well to emphasize some of the conditions which have grown out of the present system of buying and grading corn and point out some of the benefits which should result from a definite and uniform system of grading both at country points and at terminal markets. In this connection the most excellent results accomplished by the Grain Dealers' National Association in the campaign for uniformity may be referred to. Unfortunately the association has been unable to enforce their rules for grading, which have been adopted by a



SHOVELING HOT CORN DISCHARGED FROM VESSEL IN EUROPE

of the last of their surplus. The 16, 19 and 22 percentages represent the maximum allowed in the present commercial grades of No. 2, No. 3 and No. 4, respectively, according to the rules adopted by the Grain Dealers' National Association. The two higher percentages are those frequently met with in late maturing varieties of corn, and higher percentages at the time of cribbing are extremely common and are also frequently met with in corn as marketed. It must not be understood, however, that all large yielding varieties show a high percentage of moisture, for such is not necessarily

*From an address delivered at the meeting of the Indiana Grain Dealers' Association, Indianapolis, January 21, 1913.

the case. The table also shows the relative value per bushel, allowing a reduction of five-eighths of one cent per bushel for each increase of one per cent in moisture, which corresponds very closely to the present market price. Table No. 16 of our office of grain standardization shows the relative value of grain through a range of moisture content varying from 12 to 25 per cent with prices from 40c to \$1 per unit of measure. Copies of this table can be secured from the Department.

But even corn with a high moisture content at the time of harvesting and cribbing would be a less important factor if more attention were given to the cribbing and shucking. In the principal surplus corn producing states the greater part of the corn is only half shucked and goes into the crib with a general shaggy appearance almost equal to that of a poorly kept Angora cat. Likewise, too much of our corn is stored in poorly constructed cribs, rail pens or even piled on the ground without any protection from rain, snow, and all kinds of damaging weather. Much of this corn is in turn marketed in a frozen condition when it rattles and

price is determined by the demand for our surplus and this demand is determined very largely by the quality of the grain delivered.

GRAIN DEALERS PARTIALLY RESPONSIBLE.

On the other hand, the grain dealers are in no small measure responsible for the marketing of high moisture and low grade corn in that too little attention is paid to the condition or quality of the corn—the general practice being to pay the same price for all grades and that price being on the basis of an average. The careful farmer who grows and markets grain of high quality—dry, sound and clean, is entitled to a premium over the price quoted for grain of average quality. In making this statement I appreciate fully the difficulties which the grain dealer at the country station has to meet, keen competition in many cases, the lack of the necessary storage space for keeping the different grades separate, the prospect of losing the sale of a large bill of lumber or coal when he attempts to buy grain of inferior quality at its true grade or value, and a score of other conditions, including the most pernicious practice of many markets of

in many cases these modifications lead to differences in results. The form of tester now used in the grain standardization work of the Department is shown in the accompanying illustration. Full instructions for using the tester are contained in Bureau of Plant Industry Circular No. 72, copy of which can be had without cost, upon application to the U. S. Department of Agriculture, Washington, D. C.

Another most excellent illustration of the lack of uniformity is in securing the test-weight per bushel. There are about as many methods of filling the test-kettle and of stroking the kettle after filling as there are operators, and variations in weight of one or two pounds are quite common.

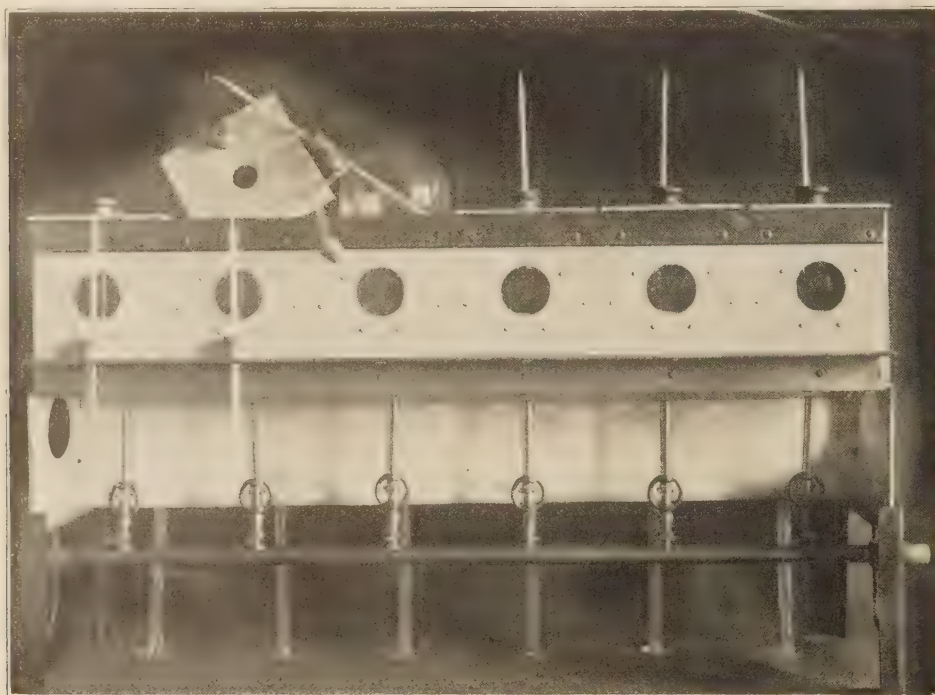
BENEFITS RESULTING FROM UNIFORMITY.

The question of the benefits which will result from uniformity and standardization needs but little discussion. In fixing these standards it is our desire to make them sufficiently specific, so that when a dealer buys a given grade of grain he will have a fairly definite idea as to the quality he may be expected to receive regardless of the market from which the purchase is made; likewise to enable the shipper and also the producer to know in advance, with a reasonable degree of certainty, what his corn should grade when it reaches the market, whether it goes to Indianapolis, Chicago, Toledo, Buffalo, Baltimore or New Orleans, granting, of course, that due consideration must be given to the deterioration of high moisture corn during transit. But by far the most important results to be derived from the standardization of corn grades will be found in the production of more corn of *better quality* and better farm methods and practices.

ELEVATOR OF A. W. YOUNG

The picture of A. W. Young's grain elevator at Strasburg, Shelby County, Ill., is not nearly so good as the house itself, which has all the facilities for handling the business of a station in so richly productive a county as Shelby. It was built in 1893, but has been kept up to the times and now has four ear corn and a shelled corn dumps, and has Union Iron Works (Decatur) handling machinery, hopper scales, 30-horsepower steam engine and storage room for 20,000 bushels of grain.

Mr. Young was born and raised on a farm about



MOISTURE TESTER STANDARDIZED BY THE U. S. DEPARTMENT OF AGRICULTURE

has the appearance of dry corn, although in reality the moisture content is high. As soon as the weather begins to warm up, the dealer, the elevator operator or the transportation company has hot corn to contend with. Too little effort is also made to pick out rotten and mouldy ears, which not only increase the percentage of damaged corn, but likewise contaminate the sound corn with which they are mixed. If such damaged ears were excluded at time of cribbing or shelling there would be more No. 2 corn and less No. 4, or "Rejected" corn.

In round numbers 600,000,000 bushels represent the corn shipped out of the counties where grown. The greater part of this amount is reshipped several times and, owing to its unfit condition, much of it becomes hot, sour and discolored before it is finally consumed or manufactured into various classes of corn products. In six out of nine ear goes accompanied to Europe by representatives of the Department, temperatures in some parts of the cargo exceeded 130 degrees Fahrenheit, with many temperature records as high as 145 to 148 degrees. In addition to those special cargoes, 178 additional cargoes were examined at the time of discharge at European ports with similar results. This phase of the work is mentioned here because it represents corn such as is being shipped from your own state. Much of this corn had to be cooled by shoveling after it was discharged from the vessels in order to check further deterioration. The cost of this extra labor and the losses resulting from the deterioration are eventually charged back to the shipper or the producer in that the market

compelling the country shipper to sell on the basis of No. 3 or better. If the shipper has to sell on the basis of "No. 3 or better" he is not likely to buy from the producers except on the same terms, and if the farmers must sell on such terms, what reason exists for making any effort to grow and market corn of better quality?

STANDARDIZATION OF METHODS AND APPARATUS.

The commercial grading of grain would be a comparatively simple process were it possible to measure accurately all of the factors which must be taken into consideration in grading, or even to establish a scale of correct values which would be applicable in every case. In view of this difficulty special attention has been given to the standardization of methods and apparatus for accurately measuring the factors of greatest importance. Uniformity of method, together with the use of properly constructed and standardized equipment, are the A B C of uniform standards for grading. Rules may be written fixing limits of moisture, weight per bushel, dirt, damaged grain and other factors, but if each inspector or shipper makes the determinations and tests to suit his own ideas or methods such rules would soon become a farce.

This is very well illustrated in the moisture tester, since many shippers and some inspection departments are using modified forms of testers which do not give the same results as the form of tester which has been standardized by the U. S. Department of Agriculture. Likewise different operators get an idea that a modification in the method will make the work of testing easier and



ELEVATOR OF A. W. YOUNG, STRASBURG, ILL.

a mile and a half north of Strasburg and in 1893 joined the Gould Brothers of Windsor to conduct a grain business at Strasburg, operating as Gould Bros. & Young. When in about 1906 Gould Bros. retired from the grain business Mr. Young bought their interests at Strasburg and has since conducted the business on his own account.

Mr. Young's business includes not only the general buying and shipping of grain, hay and grass seeds, but the retailing of hardware, stoves, implements and vehicles, flour, coal, etc.

Some oats raised sixty-seven years ago is in the possession of J. W. Yost of Ephrata, Pa. In the summer of 1845, George Yost of that town, one of the few farmers then raising oats, had an unusually large crop and divided it equally among his six sons, requesting that they each keep a sample as long as possible. J. W. Yost, the last of the sons, still has some of the oats in his possession.

DEATH OF HUNTER BROOKE

BY E. R. SIEWERS.

Hunter Brooke, the millionaire maltster and senior member of the wholesale grain and malt firm of Brooke & Pennock, with offices at 404 Bourse Building, died at the Presbyterian Hospital, Philadelphia, on January 31. His death followed a serious surgical operation performed some four weeks previous. He was born in Radnor, Delaware County, Pa., on December 7, 1842, and was just entering his 71st year at the time of his death.



Photo by Gutekunst.
HUNTER BROOKE

Mr. Brooke was a life-long resident of Philadelphia. He is survived by a widow, the daughter of Col. William B. Thomas, the first President of the Corn Association organized in 1854, afterwards the Corn Exchange and now the Commercial Exchange, and two married daughters, one living in California and the other in New York. Mr. Brooke had been a member of the Commercial Exchange since 1865 and up to within a short time before his death, a regular daily attendant.

He had one of the most polite, agreeable and sunny dispositioned characters with a good word for everyone, and was a firm believer in the sentiment, "kind words will never die," and could be properly classified as a typical representative of the old school business man. Throughout his successful life, "he proudly bore the grand old name of gentleman."

He was a brave soldier and served as officer in several of the regiments of Pennsylvania Volunteers during the Civil war and participated in the battles of Antietam, Chancellorsville and Gettysburg.

His first business engagement was with the firm of Brooke and Pugh, Philadelphia, then with F. M. and H. Brooke Company, and at the death of his brother, Francis M. Brooke, the firm of Brooke and Pennock was organized. He was a member of the Union League, the Phila Country Club, the Loyal Legion, George Meade Post No. 1 G. A. R. and the Sons of the American Revolution. During his lifetime he was given to many deeds of private charity, and was a member of Holy Trinity Protestant Episcopal Church. The interment was in South Laurel Hill Cemetery. The Commercial Exchange took suitable action upon his death.

A CORN TRAIN IN TEXAS

A campaign along similar lines to that conducted in Oklahoma was inaugurated in Texas on January 28, when a special corn train was sent through the state over the Rock Island lines. The particular object of the train was to demonstrate the advantages of growing milo maize and Kaffir corn.

Much of the territory covered by the railroad is considered especially well adapted to the growth of milo maize and Kaffir corn, two forage crops which have not been grown to a very great extent in

Texas, but are found to be exceedingly productive in almost all parts of the state. They are of the sorghum variety, as is now well known, drouth resistant and hence more dependable as forage crops than corn and oats, while being at the same time of quite as high value as stock feed.

Literature and application blanks for the entries into the milo maize and Kaffir corn contests of the Industrial Congress, which offers two separate sets of prizes for those crops, were distributed and the boys and girls and young men of the sections traversed by the train were encouraged to enroll themselves as applicants.

One class of prizes was offered for non-irrigated Kaffir corn or milo maize crops and another class for irrigated crops, the first prize in each class being \$300, the second prize \$200 and ten other prizes of \$50 each were offered in each class, making a total of \$2,000 in prizes for these crops. These prizes will be awarded exclusively for Kaffir corn and milo maize and contestants will be required to cultivate only two acres.

CARRYING CAPACITIES OF BUCKET
ELEVATORS

So many different things enter into the calculation of the carrying capacities of the buckets in an elevator that it is pretty difficult to lay down any hard and fast rules. The size of the buckets may always be approximately derived by a study of the attendant conditions, but a separate calculation is necessary in each individual case.

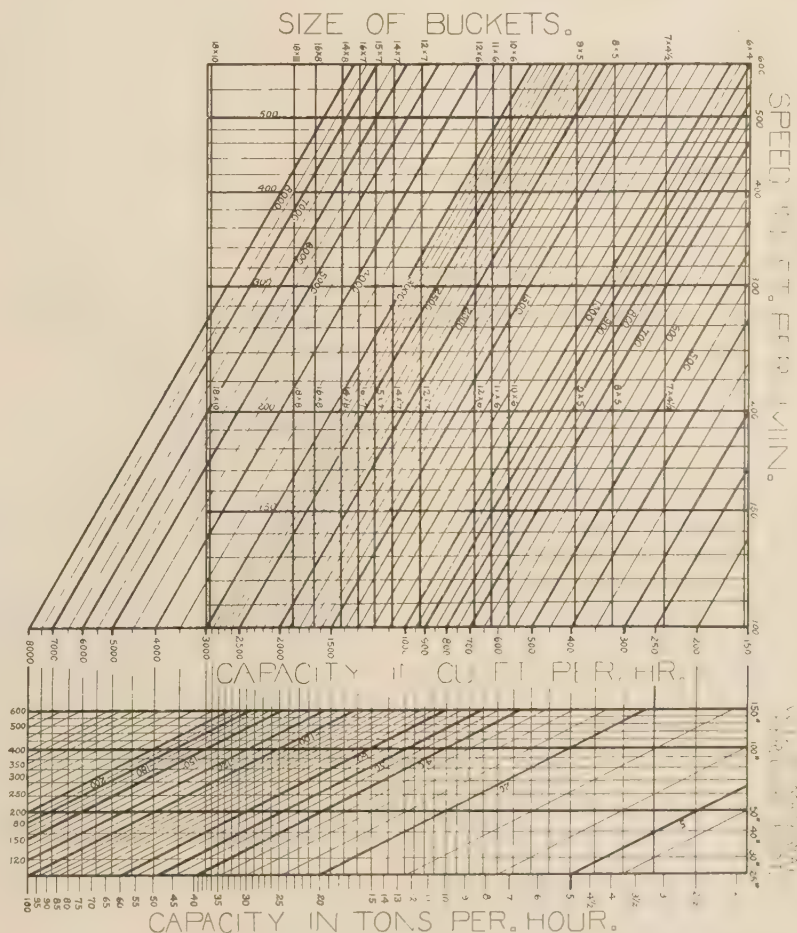
Diagrams to a great extent obviate this difficulty. One of the best diagrams or graphical formula showing the relation of the size and capacity of

Capacities in the diagram are based on a loading equal to 80 per cent of the level full capacities of the buckets, with the latter spaced 12 inches apart. For other spacings correction must be made accordingly. The elevating speed depends to a great extent upon the size of the head pulley or sprocket and the relation between the speed and the diameter of the pulley or sprocket must be such as to permit correct discharge. The form of the bucket used also has an important influence on the permissible speed. The table given above shows the speed only for grain. For heavier materials, of course, the speed must be somewhat reduced.

NATIONAL CHAMBER OF COMMERCE

At the first annual meeting of the Chamber of Commerce of the United States held at the New Willard Hotel, Washington, D. C., on January 21, 22 and 23, Harry A. Wheeler, of Chicago, was unanimously re-elected president and resolutions were adopted commending him for his work during the past year.

The one-year-old organization has made considerable progress. There have been elected to membership two hundred and eighty organizations, representing forty-two states, the District of Columbia, the three territories, Hawaii, the Philippines and Porto Rico, and one foreign country, the American Chamber of Commerce of the Levant, at Constantinople, and these organizations have a membership of 158,790. Two hundred and twenty of these bodies are local organizations, or chambers of commerce, or boards of trade, characterized by us as the civic and commercial organizations of the country; sixty-one are national organizations, which, in the final



the buckets to the speed and weight appeared recently in the Webster Method. In the upper diagram, the size of the buckets is plotted horizontally with the speed in feet per minute running vertically. The speed of grain elevator belts may be determined from the following table:

Size of head pulley, Diameter, inches	Speed of belt, Ft. per min.	Speed of head shaft, Revolutions per min.
21	250 to 300	40 to 48
24	300 to 350	38 to 44
27	350 to 400	37 to 40
30	400 to 450	34 to 36
33	450 to 500	32 to 34
36	500 to 550	30 to 32
39	550 to 600	30 to 32
42	600 to 650	28 to 30

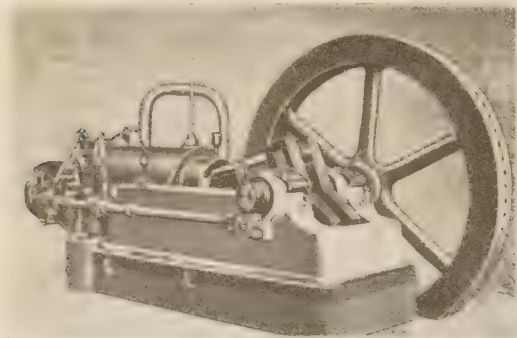
analysis, are organizations representing a trade, or group of trades.

In the course of his address, President Wheeler said:

"The greatest service which the body has rendered this year is in its helpfulness to the commercial organizations of the country. As time goes on the Chamber of Commerce of the United States will render its greatest service in the increase of efficiency through the clearing house that may be instituted for the betterment and strengthening of the work of the commercial associations of this country."

A NEW COAL GAS ENGINE

A new engine has recently been invented in England which promises to revolutionize the gas engine industry for it means that coal can be directly utilized in a gas engine. It will have the advantages both of compactness and economy. The new engine, which is the invention of Dr. A. M. Lowe, is described in *Power* as occupying a position in the gas-power field very similar to that of the locomobile in steam-engine practice; that is, it is a self-contained unit for converting the heat in the coal into mechanical energy at the engine shaft. Of course,

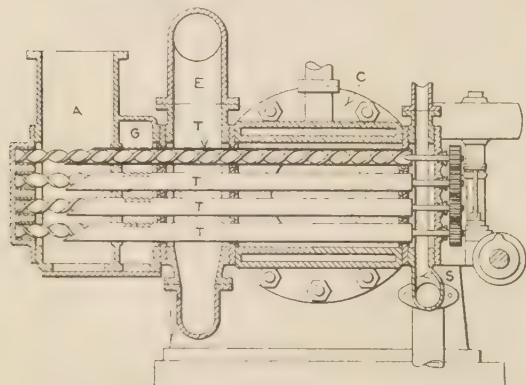


THE NEW LOWE COAL-GAS ENGINE

it has not yet attained the refinements of the locomobile and is still in a more or less experimental stage. The important fact is that it runs successfully and is claimed to have produced a brake horsepower-hour on about $\frac{1}{2}$ pound of coal—a remarkable performance, if true.

The two illustrations show the present engine as set up and also a section through the coal feeding device at the head end.

Coal is fed into the hopper *A* from which it is conveyed by four worms through the heater tubes *T*. These tubes pass through the gas chamber *G*, connected with the inlet valve, the exhaust heated chamber *E*, the combustion chamber *C* and open into the ash and soot chamber *S*. The latter is fitted with a nonreturn valve which admits air or a mixture of steam and air to the tubes. This air is drawn by the suction of the engine over the incandescent coal, maintained in this state by the heat of chambers *C* and *E*, and passes through holes



SECTION THROUGH FEEDING DEVICE

in the tubes *T* into chamber *G*. It is by this time mixed with the gases given off from the incandescent coal and the mixture passes from chamber *G* through the inlet valve into the cylinder of the engine.

In starting, the coal is brought up to incandescence by running for a few minutes on illuminating or other available gas.

The feed of the worms, which are driven through gearing at the right, may be adjusted to suit the load, and the coal after it has given off all its gas is discharged as ash into the bottom of the ash chute *S*.

With no gas-cleaning apparatus one would expect to encounter trouble from the tar. No such trouble has been experienced, however. This Dr. Lowe ascribes to the fact that the coal is heated rapidly and in small quantities; hence the tar is not gasified but passes off in the form of fine yellow dust,

MUST PROVE ORIGIN OF CORN

American exporters of corn should become familiar with the requirements of the German Government, which stipulates that the origin of corn must be clearly proved according to a report recently issued by Consul General Robert P. Skinner. Corn from the United States is dutiable at the conventional tariff rate of 32.4 cents per 100 pounds, while Canadian corn is subject to the general tariff rate of 54 cents per 100 pounds. As Canadian corn may be shipped to Germany from ports in the

United States, and corn from the United States may be shipped to Germany from Canadian ports, the question is of importance.

The Germany Imperial Treasury Department recently expressed dissatisfaction with the form of the inspection certificates which have up to the present been used to cover these shipments. It has been announced that the mere certificate of a Chamber of Commerce of a city of the United States, with no statement regarding the origin of the corn, is not itself sufficient to prove the origin, but must be accompanied by other documents.

A Concrete Elevator in Richmond

Some Interesting Features Which Attract Immediate Attention—General Arrangement of Storage and Working Space—Electrically Driven Throughout

When visiting the grain elevator of the W. F. Richardson, Jr., Co., Inc., Richmond, Va., one is first impressed by the ideal facilities for shipping. The big reinforced concrete elevator has a private siding running for a distance of 145 feet, and directly south of this siding is a transfer track owned and operated jointly by the R., F. & P. and the C. & O. Railroads. The former road handles Pennsylvania R. R. and B. & O. R. R. business. The elevator property also runs back to the tow-path of

that the entire stretch through the elevator and adjoining warehouse has a maple floor.

The working floor has a large separator for cleaning the grain, together with a dust collector, an improved power shovel, two automatic sacking machines and a 10-horsepower electric motor. Running from the pit below the track to the top of the cupola is a steel elevator leg, 85 feet long, having a 6-ply 16-inch rubber belt, with 14-inch steel buckets. This elevator leg is operated by a 15-



ELEVATOR OF THE W. F. RICHARDSON, JR., COMPANY AT RICHMOND, VA.

the old James River and Kanawha Canal, thus permitting shipments by water when desired.

The elevator faces the center of the railroad siding and has a receiving pit below the track. The working floor is at the car level and there is a pitch of 12 feet to the bin bottoms. The bins are 31 feet in height above the ceiling of the working floor. The pit walls, working floor columns, girders, bin slabs and bin walls, including division walls, are all reinforced concrete. Above the bins there is a structural steel cupola 30 feet high. The sides and roof of the cupola and the roof of the elevator are made of steel Hy-Rib with concrete. The floor of the elevator is concrete with maple covering, so

horsepower electric motor placed in the cupola, and delivers the grain to a 500-bushel steel hopper Fairbanks Scale with registering beam also in the cupola. Directly under this is a steel telescope trolley spout for conveying grain to any of eleven bins or to a steel car-loading spout.

A one-story warehouse and office connects with the front of the elevator and there is also a small warehouse in the rear. Although these adjoining buildings are at present only one story in height, the brick walls and foundations have been made extra heavy, so that the buildings can be run up to four stories in height, when necessary, and still conform to the building code regulations of Richmond.

Getting Square With the Scooper

An Enterprising Elevator Owner Unloads Some Spoiled Grain on an Undesirable Competitor

By GUIDO D. JANES

Bill Bucket gazed out of the office window into the early March air. Sweating grain and freezing water jackets had changed him from a man of few cuss words into one of many.

He was debating whether he would kill himself or go into the real estate business, when his eyes fell upon a scooper in the upper yards. The chap was loading a grain car. This, of course, brought the argument to an abrupt close, and the debater was thrusting an arm into the office drawer to secure a revolver when he suddenly changed his mind.

"I'll make money out of the fool instead of permitting him to make it off of me," laughed Bucket,



"MULCHAY LOOKED PLEASED."

retracing the footsteps of his arm. "And I will turn defeat into profits and that competitor into a laughing stock."

With these remarks he beat it for the sacking room, where he met Mulchay, the fat foreman.

"How much spoiled grain have we in the upper bin?" demanded the grain man of his corpulent employee.

"Five hundred bushels, and none of it fit even to feed to skunks. Guess we lost plumb out on it."

"Yes, Mulchay, we have lost," was the rejoinder; "but we have not lost permanently. I want you to dope it up with sufficient good grain to cover up its worthlessness. We will unload it on that scooper up the yards. He doesn't know the difference between a moisture tester and a lung tester. It is no crime to be crooked with a crook."

"Right you are, proprietor. But how are we to fight fire with fire?"

"This way: I will borrow your team and wagon and load up with the rotten grain and haul same over to my amateur competitor to sell."

Mulchay looked pleased. In fact, he backed up the pleasure with a perfect willingness to lend his team any old time that it was wanted.

"We will carry out our plans tonight by loading the wagon," said Bill, showing gratitude in the tone of his remarks, "and on the morrow I will get busy."

"All right, sir. Everything seems rational and sane but one small detail. The scooper knows you and will smell a rat."

"Don't worry, old man. I have that part of the program all mapped out."

Late that night the foreman and the boss filled the wagon with the doctored grain and hauled it to Bucket's back yard, where it remained until morning.

Without going down to the office Bill hitched the

team to the load, climbed into the wagon and drove down to the railroad yards. En route he passed Mulchay.

But Mulchay did not recognize his boss. No, he mistook Bill for another party, and was about to climb upon the vehicle and throw off the intruder when the driver spoke up.

"Sh——" he said, "it is only me in disguise."

"Well, I be blowed," Mulchay cried, falling back and taking in Bucket from head to foot. "If you ain't the most perfect looking farmer I ever saw. Where did you get that regalia?"

"Wore it to a masquerade last year. But so long now; I must hurry."

So he drove on, leaving the astonished employee in the background, and presently reached the scooper, who was already on the job for the day.

"What you offering fer grain?" asked Bill, as he halted near a grain car.

The scooper, a sallow looking, mushy kind of fakir, looked at the bogus farmer a minute to size him up and then offered him seventy-two cents a bushel.

"Better by five cents than that old grain dealer down at the elevator," returned Bill. "I will just take you up. Want me to unload now?"

"Yes. Drive right up. Want to fill this car to-day. Got any more?"

"You bet. Five hundred bushels."

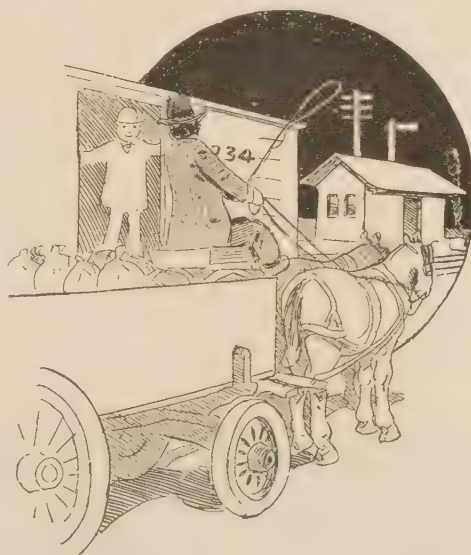
"I'll take it all, if you can make delivery immediately."

"Give it all to you by night. It is stored down in that elevator. He is going to charge me rental—the hog!"

"Good for you. These elevator men are all ringers."

"You speak the truth," returned the fake farmer, starting to unload. "I will tell my neighbors about you."

So the grain was unloaded, and by nightfall the



"WHAT YOU OFFERING FOR GRAIN?"

five hundred bushels of no-grade grain had been transferred to the scooper and a neat little bunch of money for it was nestling in Bucket's trousers' pocket.

"Best streak of luck I ever ran across," cried Bill, as he and Mulchay talked about it in the office two days later. "To think that I not only realized on the worthless stuff, but changed 1913 into a lucky thirteen."

"That's not all," cried the foreman, suddenly getting excited over what he just then saw out of the window. "Look!"

Bill wheeled about and sauntered his eyesight out the window. There on the depot platform stood the

scooper, and he was cussing everybody out from railroad president down to section hand. The local freight had returned to him three cars of grain. The terminal market had sent it back since it was no good.

"You are a genius," cried Mulchay, slapping Bill on the back. "This will fix that scooper for all time to come. It will make him a better man and will inspire confidence in you. Let's go across the street and get a coca-cola."

RESOLUTIONS ADOPTED FOR J. W. DUSENBERY

The following resolutions of respect have been adopted on the death of J. W. Dusenbery by his fellow members of the National Hay Association:

Again the Grim Reaper has suddenly called away from us one of our esteemed members. Only a few weeks ago we were called upon to record the death of one of the oldest of our members. We little thought then that it would be our sad duty to record another vacancy in our membership, another home made desolate, yet our Heavenly Father in His wisdom saw best to send the swift messenger to take another spirit home.

Joseph Warren Dusenbery, senior member of his firm, passed away January 3rd, 1913. He was a worthy member of our association, a most substantial and businesslike man and engaged for many long years in mercantile enterprises. He was thoroughly practical, always at the post of duty. In all business dealings he was strictly honest, giving no cause for complaint, desiring to live at peace with all. He was of a firm and positive character, yet genial in spirit.

On account of his many good qualities his memory will always be fresh and full of good-fellowship in the eyes of those with whom he came in contact. The bereaved family will no more have the advice in counsel of the wise leader, and to those we extend our sincere and heartfelt sympathy.

H. G. Morgan, Chairman; Chas. D. Carlisle, R. E. Karnes.—MEMORIAL COMMITTEE.

GOVERNMENT ELEVATOR REPORT IN MANITOBA

The report of the Manitoba government elevators from September, 1910, to August 31, 1912, was placed on the table at the Legislature on January 28 by Sir Redmond P. Robin. The report is short and contains only a brief statement on the financial position, which is as follows:

EXPENDITURES.	
Salaries, commission.....	\$ 9,749.96
Office	14,331.66
Operators	61,299.06
Insurance	21,531.75
Working expenses.....	43,140.57
Travelers	7,330.51
Printing	2,502.50
Stamps	446.80
Maintenance	23,252.44
Office expenses.....	5,163.72
Total	\$189,657.95
Refused storage.....	73.35
	\$189,731.30
REVENUE.	
Cash received.....	\$169,212.88
Refused	1,451.18
	\$170,664.06

It will be remembered that the Manitoba government, after making the failure recorded by this statement, leased the elevator to the farmers. This is the first time that the figures have been made public. It has been frequently asserted that it was the failure of the farmers to patronize the state elevators that led to the failure of government ownership and operation.

The grain men of Superior, Wis., have protested against placing that city, as is proposed, in the Minnesota district as a secondary port. A request has been sent to the Secretary of the Treasury asking that Superior be allowed to remain in the Wisconsin district, in the same classification, with Milwaukee as principal port.

Minnesota Farmer Grain Dealers Hold Convention

Sessions of Sixth Annual Meeting at Minneapolis Marked by Exciting Discussions on Topics of Current Interest

The sixth annual convention of Farmer Grain Dealers of Minnesota was held at the West Hotel, Minneapolis, Minn., January 28, 29, 30.

President L. A. Smith of Truman called the first session to order at 2 p. m. January 28 and a cordial address of welcome was given the association by Hon. Wallace G. Nye, mayor of the City of Minneapolis. An address of welcome on behalf of the Chamber of Commerce was made by its president, F. B. Wells.

A committee was then appointed, composed of President Smith, P. D. Gilbertson and M. Hagenback, to meet with the farmers in the State Legislature and confer with them on matters looking to the farmers' interests.

President Smith appointed the following committees:

RESOLUTIONS—M. R. Meisch, H. J. Farmer, T. Frederickson.

AUDITING—A. O. Lauder, C. T. Price, C. G. Finch.

TUESDAY EVENING SESSION

Vice-President H. J. Farmer occupied the chair at the evening session. The first speaker was H. T. Belk, secretary of the South Dakota Farmers' Grain Dealers' Association, who told about conditions in his territory.

Mr. Peterson of Bisbee, N. D., in speaking for his state said they had 350 farmers' elevators in the state but only about 30 belonging to their association. He recommended that some movement be started looking to the interest of farmers in state legislation, as, being an agricultural country, they needed laws which should benefit the farmer.

A general discussion then took place over the question of "How Best to Divide the Profits of a Farmers' Elevator," in which several financial plans were presented by various members.

Manager J. S. Danens of Hancock, Minn., said: "Four years ago I took charge of the elevator at Hancock. Profits were divided by shares the first year, four years ago. By getting 100 per cent on shares we paid \$3.90 cash on a share. There was quite a kick from parties who hauled grain and did not get a profit, so it was decided the profit should be divided per bushel. We had 46,000 bushels of stored grain which we shipped out and had to pay a margin of one or two cents. We lost about \$3,000. We had enough money to pay 10 per cent on stock. Last year the profit was better and we charged storage. We had \$2,770, paid 10 per cent on shares and paid to every farmer and every stockholder 1 cent for oats, 1½ cents for barley and 2 cents for flax. The non-shareholders got half as much profit as shareholders. The money is placed to their credit and when they have enough to amount to \$10 or more they get a share in the elevator. That is how we divide stock. If there is any better way in which profits can be divided I would like to hear it."

Theo. Frederickson of Murdock, on the same topic, said: "My opinion about this question is that when we organize farmer elevators through the country we do not organize them for profit but to make good markets. What made us build these elevators was for a market, and I think that is the way with all the farmers' elevators. That is the main thing, and the other thing is to run the business on a paying proposition. Buy grain so we can accomplish a little more than our expenses. I think every man who hauls grain to a certain house should be compensated according to the amount of grain hauled. That is how we have always done it. Seventy-five per cent goes in profits and 25 per cent to the sinking fund. The 7 per cent is divided among the stockholders, according to the number of dollars' worth of grain hauled. We have always had good success; always paid 10 per cent on stock. Shares are \$25 each. The man who has not hauled any grain gets a good per cent on his money and is well paid."

After some further views on the subject the session adjourned.

WEDNESDAY MORNING SESSION

President L. A. Smith rapped for order promptly at 10 a. m. Wednesday morning and Vice-President H. J. Farmer of Airlie made an interesting address on the subject "The Future Development of Our Association." He was followed by opinions from members on the same topic, who were all enthusiastic over the worth and growth of the organization.

The matter was next brought up of a bill before the State Legislature prohibiting line house companies paying more for grain in one place than another, taking freight charges into consideration. A committee was appointed to go to St. Paul and do all it could to have the bill passed upon favorably. The following resolution was adopted:

"Recommendation that a law be passed by the legislature now in session making it obligatory upon grain buyers to pay the same prices for the same quality of grain at stations where freight rates to Minneapolis are the same. Endorsement of the bill of Senator Andrew C. Olson which provides for two Minnesota delegates to go to Europe to investigate farmers' co-operative plans and report at the next legislative session."

M. R. Meisch of Argyle spoke upon the subject "How the Association Can Best Serve Its Members."

The afternoon session opened with an address by John G. McHugh, secretary of the Minneapolis Chamber of Commerce. Mr. McHugh's address followed along the lines of his address before the Grain Dealers' National Association last fall and published in full in our report of that meeting. It was a very able presentation of the value of grain exchanges to farmers' elevator companies, containing irrefutable

arguments as to why the farmer should favor future trading in grain.

"The Solution of the Economic Transportation Problem" was the subject of an address by Capt. Chas. Campbell of the Star & Crescent Navigation Company. In summing up Mr. Campbell said:

"I presume there are those who say that navigation is a method of the past, and that the railroad is so much faster. The railroads haul freight about 50 miles a day. That is at the rate of about two miles per hour. Going down river with the current and a small power we will average between here and New Orleans six miles an hour, coming and going, or, in other words, we will cover the 4,000 miles from Minneapolis to New Orleans and back in thirty days. I defy anyone to show me one instance on record of where any of that grade stuff would cover half that distance in the same amount of time by rail.

"With the opening up of the Panama Canal we reach the Pacific Coast. The same thing will apply to flour as well as lumber. Flour will go that way. We can get to the western coast of South America with the products of Minnesota or any of these Northwestern states and deliver them on the Pacific Coast for two-thirds of what the charges are by rail. It is 1,850 miles by rail to Seattle, and a tour by water would mean 7,500 miles, but we travel that distance for two-thirds of the charges. We will bring the products of the farm to Oregon and Washington and bring the lumber here for two-thirds of what it costs you today by rail."

P. P. Quist, state weighmaster, next made an address on "How Grain Is Handled Under State Supervision," giving in full all the facts and methods of work of the weighing department.

Following Mr. Quist's address election of officers took place, resulting as follows: President, M. R. Meisch, Argyle; secretary, J. L. Demaray, Pipestone. Directors: Alfred Froberg, Burr; W. P. Moran, Iona; Adam Brimm, Stewartville; A. A. Carl, Hardwick; P. D. Gilbertson, Glenwood; John Shelteus, Raymond; A. O. Lauders, Slayton; E. G. Evans, Tracy; John Gustafson, Windom; L. A. Smith, Truman; T. Frederickson, Murdock.

THURSDAY SESSIONS

The sessions of Thursday were given over to unfinished business. W. L. Harris read a paper on "How to Find a Way." The committee on resolutions presented its report. It was adopted, as follows:

RESOLUTIONS.

Resolved, That we, the Farmers' Grain Dealers' Association of Minnesota, now in session, declare that Minneapolis has entertained our convention in a royal manner, and that we most sincerely thank the Grain Exchange of Minneapolis, the Hotel West, and all other good people who have helped us to make our convention successful and our visit pleasant.

That we thank our officers and directors for their faithful work during the past year, and pledge our full support to the new board for the coming year.



DELEGATES AND VISITORS TO SIXTH ANNUAL MEETING OF MINNESOTA FARMER GRAIN DEALERS

That we recommend the adoption of the so-called "Kansas Blue Sky Law" governing the prevention of graft in Minnesota.

That we favor the enactment into law the co-operative law by our state legislature of Minnesota, and request our board to take steps necessary to secure such legislation.

That we urge our state university and colleges and our institute boards to take more interest in teaching true co-operation in our schools and institutes.

Resolved, That we approve of the action taken by our board of directors in forming a National Council for Farmers' Co-operative Companies, and approve the plans as outlined for perfecting the same.

Resolved, That we urge all farmers' companies in the state to pay the most careful attention to their systems and methods of bookkeeping, and request

our state board to assist local companies to secure reliable audits at reasonable prices.

Resolved, That we commend the courage of the Farmers' Elevator Company at Hardwick in contesting the reciprocal demurrage law, and pledge our support to every honorable movement set on foot to secure an effective reciprocal demurrage in this state.

Resolved, That we instruct our directors to appoint a committee of three competent grain men to investigate methods now in vogue in handling grain in the Minneapolis market, and publish their findings.

Resolved, That we favor the Bendixon co-operative bill now pending before the legislature, and urge our legislators to support it.

After some further matters to come before the association the meeting adjourned *sine die*.

Indiana Grain Dealers Meet at Indianapolis

Interesting Joint Session Held with Millers—Many Profitable Points Developed for Discussion—Excellent Program and Large Attendance

Following the custom which has prevailed during the past four years, the Indiana Grain Dealers' Association held its mid-winter meeting jointly with the Indiana Millers' State Association. The sessions were held in the Assembly Room of the Indianapolis Board of Trade, the first meeting being called to order at 2 p. m., January 21, with President C. A. Ashpaugh of the Grain Dealers' Association, and President W. L. Sparks of the Millers' Association jointly presiding.

Both President Ashpaugh and President Sparks made brief addresses and spoke of the advantages of thus meeting together. They enumerated also some of the present legislative measures which should be enacted into laws for the benefit of their respective organizations.

"On the part of the grain dealers these legislative enactments should include," said President Ashpaugh, "the Senate Bill 957 known as the 'Pomerene Substitute,' and the Cary Time Filing Bill, a measure which seeks to provide for the time specified for filing and delivering messages by telegraph companies."

President Sparks spoke of the troubles to millers arising from wild onions and garlic in Indiana wheat, and later a resolution was adopted recommending the passage of a bill by the state legislature providing for a penalty to farmers who raised wild onions or garlic with their grain. It was thought that only by legislative methods, the existing evils could be ended.

GRAIN ASSOCIATION WORK.

E. C. Eikenberry, of Camden, Ohio, president of the Ohio Grain Dealers' Association, read an interesting paper on "Some Phases of Grain Association Work." Mr. Eikenberry presented some very strong arguments as to why the grain dealer should be

a member of his local and state organization. On this line he said:

"If every grain dealer, or miller, member and non-member, should pay willingly into his association treasury 10 per cent of the actual financial benefit derived from his local, state and national associations, each and every association would have at its command financial resources sufficient to support every legitimate activity and manifold to enhance its value to the trade at large."

Mr. Eikenberry also arraigned competition as leading to a vicious form of economic waste and made plain that co-operation enabled honest business to thrive most successfully.

Dr. J. W. T. Duvel of the Bureau of Grain Standardization, U. S. Department of Agriculture, Washington, D. C., read a paper on "The Federal Standardization of Grain." This paper appears on another page of this issue.

AGRICULTURAL EDUCATION.

John L. Ketcham of Indianapolis next delivered an address on "Agricultural Education; the Most Important Branch of the Work Recommended by the Commission of Industrial and Agricultural Education." Mr. Ketcham contrasted Indiana with other and older states of the Union to the former's disadvantage in the matter of bushels of grain raised per acre, showing that farmers in those older states were having the benefit of agricultural education. The contrast of Indiana with countries of Europe presented still more discouraging figures. He said that Indiana ought to be able to produce an average of 70 bushels of corn per acre and 28 bushels of wheat and with proper instruction this could be done.

F. E. Davis, president of the Tipton County State Bank, Tipton, Ind., gave a short talk on the corn

growing contest conducted by that institution the past year.

William C. Hayward of Indianapolis made an address on the subject of the "Closer Relations Between the Shipper and His Market." He advocated frequent visits of the country grain shipper to his market, and the thorough study and understanding of its methods. It was brought forth that co-operation, and acquaintance undoubtedly make business more profitable and more safely conducted by both the country shipper and the terminal merchant.

A paper prepared by J. P. Cavenagh, Superintendent of Freight Transportation, New York Central Railroad, on "Car Service Equipment and Movement" was read by Mr. Clark, after which the session was adjourned.

TUESDAY EVENING SESSION

In the evening a smoker and entertainment was given at which the principal speaker was Professor J. Lawrence Laughlin of the University of Chicago, who spoke on "The Urgent Need of Banking and Currency Reform." Following the address there were several vocal selections and readings by local Indianapolis talent and at 10:30 a luncheon was served.

The committee of arrangements for the evening meeting and entertainment was composed of Wm. C. Hayward of the Mutual Grain Company; E. K. Shepherd of the Cleveland Grain Company, and Frank A. Witt.

WEDNESDAY MORNING SESSION

Immediately upon calling the Wednesday morning session to order at 10 a. m., President Ashpaugh announced the time available would be given over to general business without regard to program, the first subject for consideration being terminal markets.

E. H. Culver, speaking for Toledo, said that he would be glad to know if there were any complaints on Toledo inspection. Personally he knew of none.

Chas. Kennedy of Buffalo referred to complaints from Indiana shippers regarding the Buffalo market. Mr. Kennedy said:

I am president of the Corn Exchange of Buffalo and am here not as a receiver, but as a representative of the market. I would have preferred another expression from the shippers so that we might more arbitrarily settle this matter, for there seems to have been some discrimination against Buffalo on account of alleged improper methods. I am vitally concerned about these methods, and so is every shipper in Buffalo. If there is no difference in existing conditions it is unjust to that market.

If errors are made frequently by the Buffalo market, not as individuals, but as a market, you should demand some changes in the methods of inspection used. Buffalo receivers lose a great deal of business, by your not sending them your business, and are keenly alive to that fact.

Within the past two weeks this fact has been shown to us clearly and it is my wish to clear up the matter. Reports were received from the Indiana Grain Dealers' Association through the secretary of the fact that there had been some complaint regarding the moisture test.

Buffalo has established as the grade for No. 3 corn, 19 per cent moisture as the maximum. There are several factions in the Exchange. One faction insists that 19 per cent of moisture should not be graded No. 3 corn and one that it should be higher still. Personally I differ from either of these opinions



ASSEMBLED IN FRONT OF CONVENTION HEADQUARTERS AT MINNEAPOLIS.

as I do not think that it should enter into the distinct grading of corn.

When complaints of this character were brought to Buffalo, some time ago, it became necessary for a set of uniform rules to be adopted and it is by these rules that that market is governed, and shippers to that market must abide by these conditions else the receivers at that point are unable to accept.

It is clear to most of the receivers that these rules are much too drastic, and better counsel prevailed, receivers asking for a change under which they may receive more business. Buffalo makes this in a sense of fairness, as we are all conscientious and striving simply for a method of protection.

We ask at this time that a committee of the Indiana Grain Dealer's Association be appointed to meet with us in our city, going over every detail of procedure, should they care to do so at any time.

A recent letter from Mr. Riley expresses satisfaction but there arises a regret in that letter that the tests are not entirely as correct as they might be. Pursuant to these demands we have made certain tests of corn in our market and in others, and the results are not uniform, showing a discrepancy of methods. As to the suggestion that a sample be tested in Buffalo, one here in Indianapolis, and one in Decatur. Mr. Riley need not go to that trouble, as he will find a discrepancy in all returns.

These variations are due to an irregularity of methods. I will present data given at the Council of Grain Exchanges, showing the differences of opinion that are likely to arise in the proper procedure for the moisture test.

The question of uniformity has so agitated the Buffalo Exchange that I have taken steps to iron out these difficulties.

In seeking to do this, grain exchanges should not modify these rules without first seeking the State Grain Association's ideas. Therefore I hope to justify a correct conclusion, to which we have come. It is not so important that these exchanges be correct—if they are uniform.

I prepared questions which were sent to every inspection bureau of the central markets throughout the country, and have received replies showing such a wide variation in practices as to prove the defects of the entire system.

These are Buffalo's attempts to get at the bottom of this matter, and settle for all time the question of standardizing their methods.

A general discussion followed relative to the moisture test of corn. The opinion seeming to prevail that the test should be used as a guide for determining the grade, rather than as the determining factor itself. Reports showed that where tests had been made on the same corn in identically the same way in different localities there had been a variation of .3 to .5 per cent.

RESOLUTIONS

The report of the committee on resolutions was received and the following resolutions were adopted:

WILD ONIONS AND GARLIC.

Whereas, the introduction and growth of wild onions and garlic in some parts of this State has become a menace to the farming interests, as well as the milling and grain handling interests, and

Whereas, it has been brought to the notice of the Indiana Millers' Association and the Indiana Grain Dealers' Association, in joint session, that legislation is proposed tending to the elimination of this trouble, be it

Resolved, that these Associations in joint session favor any practical legislation to this end, and that the legislative committees of these Associations together with the secretaries, be instructed to co-operate with Senator George William Curtis, or any other member of the Legislature, in drafting and presenting a suitable bill to this end and that action be taken immediately.

FUNDS FOR PURDUE UNIVERSITY.

Whereas, there is now before the Indiana Legislature a request from Purdue University for appropriations for the maintenance, land and buildings, which we feel are very necessary to meet the growing needs of the university, and

Whereas, the work of Purdue University cannot be handicapped by lack of sufficient funds, without interfering with the progress and development of Indiana agriculture, be it

Resolved, that the Indiana Millers' Association and the Indiana Grain Dealers' Association, now in joint convention assembled, endorse the request of Purdue University, and respectfully urge that the members of the present General Assembly make an appropriation which will adequately meet the needs of the university.

CARY TIME FILING BILL.

Whereas, poor service and inattention of the employees of the Telegraph Companies at many offices, particularly in instances where there are not competitive offices, too frequently results in miscarriage of business transactions and financial loss, and

Whereas, a bill known as the Cary Time Filing Bill, has been presented to Congress, with a view to remedying such conditions, be it

Resolved, that we favor such legislation in this bill or another as shall fix the responsibility, in such cases, to make possible the collection of any damages that may accrue.

LABORATORY AT INDIANAPOLIS.

Whereas, the establishment and maintenance of a Laboratory at Indianapolis, Indiana, by the Grain Standardization Bureau of Plant Industry, U. S. Department of Agriculture, would bring this service into the heart of one of the greatest grain growing sections of the country and bring the benefit not only

to us as business men, but to all the farming communities which we serve, be it

Resolved, that we endorse the petition of the Indianapolis Board of Trade that such a laboratory be established and maintained at Indianapolis.

ONE CENT POSTAGE.

Whereas, a bill is now before both the branches of the national Congress, proposing the reduction of letter postage from 2 cents per ounce to 1 cent per ounce, and

Whereas, we believe the present charges on this class of mail excessive as compared with other classes and the interests of the service, be it

Resolved, that this Association favors and urges the passage of proper legislation, to the end that first class matter be reduced to 1 cent per ounce.

LOADING AND UNLOADING CARS.

Whereas, a bill has been introduced in the national House of Representatives at the instance of the Interstate Commerce Commission, providing specific law regarding unnecessary details in loading and unloading cars, and

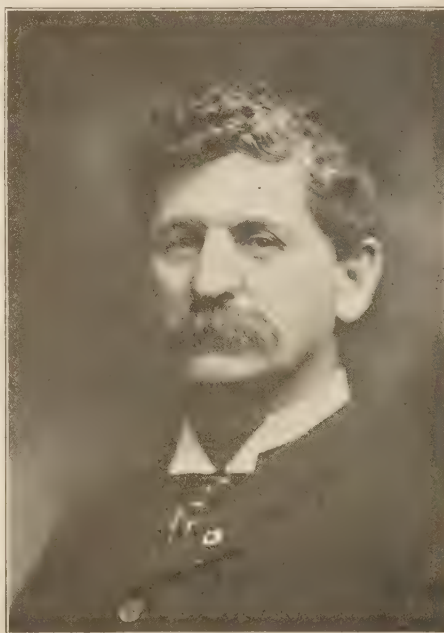
Whereas, the same bill provides specific regulations to be observed by the railroad companies in furnishing cars ordered by shippers, and

Whereas, we believe in both instances the legislation is warranted by conditions which are becoming more acute every year, be it

Resolved, that we endorse House Bill No. 26678 and urge its passage.

MEMORIAL.

Whereas, in the death of John Studabaker of Bluffton, the Grand Old Man of the Grain Trade of Indiana, has passed away, at the ripe age of 95, leav-



SECRETARY CHARLES B. RILEY.

ing a record of probity and honor in business and social relations, be it

Resolved, that these Associations extend their heartfelt sympathy to the family of the deceased and to his business associates, also be it

Resolved, that in the death of Mr. Frank Mull of Rushville, our Association has lost one of its most loyal members, be it

Resolved, that we extend our sympathy to his family and to his business associates.

A motion prevailed offered by John McCardle that all grain dealers both members and others of the state, should keep a record of cars and weights at home, and at the terminal market, a record of inspection, classification and discounts, for six months, reporting to Chas. B. Riley the data obtained at the expiration of that period and that this data be read at the summer meeting. The meeting then adjourned.

MID-WINTER NOTES

From Louisville came G. S. Zorn and G. B. Ballard; from Baltimore, O. M. Gibson, and Philadelphia sent W. M. Richardson.

J. A. A. Geidel of D. G. Stewart & Geidel, represented the Pittsburgh market.

A. F. Brenner was a visitor from the Minneapolis market and T. A. Bryant was in attendance from St. Louis.

Buffalo grain merchants included H. T. Burns, Chas. Kennedy, J. J. Rammacher, W. G. Heathfield and H. F. Keitsch.

A Brown-Duvel Moisture Tester from the Seed Trade Reporting Bureau, Chicago, was shown in operation by H. A. Brown.

From neighboring Illinois there were Secretary S. W. Strong, Urbana; C. H. McCune, Hoopeston;

F. W. Weeks, Peru; T. Maddox, Scotland; M. Orm-dorf, Mattoon.

F. H. Holt of Indianapolis represented the Millers' National Insurance Company of Chicago.

The Mutual Grain Company held open house Tuesday evening, and souvenirs in the form of patent pencils were distributed to all callers at their office.

The Toledo delegation included E. L. Southworth, Chief Grain Inspector, Edw. H. Culver, F. W. Jaeger, Charles Knox, C. W. Mollett, O. H. Paddock, H. W. Applegate, J. W. Young, D. B. Noyes.

An interesting exhibit at the meeting was a working model of the Zeleny Thermometer, an appliance for registering the temperature of grain in bins, in the elevator or mill office. Demonstrations were made by L. H. Des Isles, manager of the Western Fire Appliance Works, Chicago, the manufacturers of the thermometer.

Machinery interests were looked after by F. H. Morley and C. L. Hogle, representing the Invincible Grain Cleaner Co. of Silver Creek, N. Y.; A. S. Garman, representing the Huntley Mfg. Co. of Silver Creek, N. Y.; M. J. Young with Philip Smith Mfg. Company, Sidney, Ohio; H. A. Brown representing the Seed Trade Reporting Bureau of Chicago; L. H. Des Isles, Chicago; F. W. Fritchett with Avery Scale Co., Chicago; G. H. Baxter with Richardson Scale Co., Chicago.

Chicago grain merchants were G. E. Booth with Lamson Bros. & Co.; R. W. Carder with W. A. Fraser Co.; P. S. Goodman with Clement, Curtis & Co.; J. W. Adam with Rosenbaum Brothers; G. L. Stebbins, of Savers Grain Co.; E. D. Shumway with Quaker Oats Co.

The Cincinnati grain men included D. B. Granger, P. K. Gale, F. E. Fliming, A. Gowling, E. A. Fitzgerald, J. R. Stafford.

F. W. Jaeger of J. F. Zahm & Co., Toledo, left a day early in order to make an eastern trip which should include Washington, D. C., Baltimore, Philadelphia, Toronto and other points. On January 30 he left Toledo for a pleasure trip to California, intending to return home about March 5.

Kennedy Car Liners, which have grown to be a necessary part of nearly all elevator equipments, were represented by Fred W. Kennedy of Shelbyville, Ind.

Bert Boyd's special artist-on-the-spot photography proved very popular and reports were that no dealer denied his own likeness.

THE ATTENDANCE

The official registry showed the following dealers in attendance: Fred C. Palin, Newton; C. S. Patten, Morristown; J. S. Huffer, Yorktown; F. C. Williams, Dayton; B. E. Page, Mellott; Chas. Buchert, Prescott; B. F. Crabbs, Crawfordsville; Walter Schnabel, Lafayette; Ed. Lee, Crawfordsville; C. H. Stevenson, Frankfort; J. L. Schalk, Anderson; A. B. Hinshaw, Nora; H. L. Brown, Auburn; A. P. Watkins, Lincoln; H. N. Brown, Kingman; E. K. Sowash, Middletown; Chas. Betts, Forrest; Fred Merlau, New Palestine; T. B. Wilkimer, Knightstown; E. E. Elliott, Muncie; A. E. Waltz, New Palestine; Robt. Alexander, Lafayette; Francis T. Hinshaw, Nora; C. M. Barlow, Kokomo; J. F. Barlow, Sharpsville; F. H. Farnsworth, Kokomo; John Howell, Cammack; H. L. McNaughton, North Vernon; G. W. Drake, Sheridan; O. A. Dutches, Kokomo; A. Grove, Frankfort; F. E. More, North Salem; D. C. More, Waynetown; F. H. Scudder, Fountaintown; C. W. Urmston, Tipton; Frank O. Fitten, New Harmony; Ura Seeger, Clarks Hill; L. W. McFadden, Walton; Thos. E. Kaough, Arcola; C. E. Robinson, Medarysville; Wm. Frank, Frankfort; W. H. Leisure, Gwynnville; Fred B. Fox, Tipton; J. C. Batchelor, Sharpsville; F. O. Branch, Martinsville; A. M. Wellington, Anderson; Sam Staggs, Kokomo; C. E. Nichols, Lowell; Wm. Nading, Shelbyville; H. W. Runmann, Greensburg; D. L. Brookie, Frankfort; J. P. Allen, Sullivan; H. G. Wolf, Morristown; J. N. Gordon, Summitville; Oscar Yundt, Stockwell; N. E. Walker, Frankfort; J. A. Hughes, Brookland; Geo. Malsberry, Darlington; Arnold Orme, Rushville; L. N. Sablin, Max; C. H. Grimes, Kirkpatrick; J. F. Nolte, Aurora; L. C. Smithson, Hazelrigg; G. T. Burke, Decatur; J. T. Sims, Frankfort; J. G. Fox, Manilla; G. D. Stauffer, Nappanee; W. O. Neunschwander, Berne; J. G. Clark, Hagerstown; F. W. Weeks, Peru; H. E. Garrison, North Grove; O. P. Hollingsworth, New Augusta; E. A. Luginbill, Berne; C. F. Wall, Lizton; N. A. Wall, New Ross; Wm. Bosley, Milroy; T. E. Morrison, Kokomo; J. S. Hazelrigg, Cambridge City; Chas. M. Clark, Whitestown; Ernest Orndorff, Mattoon; M. C. Scott, Scircleville; M. S. Hufford, Frankfort; C. G. Egly, Fort Wayne; Fred Wood, Kokomo; H. Patten, Morristown; Cloyd Loughry, Monticello; J. J. Kellerher, Frankfort; A. E. Betts, Frankfort; W. M. More, Covington; Chas. E. Bear, Stockwell; W. A.

Council of Grain Exchanges Meeting

Discussions of Legislative Problems, Uniform Rules, Variations in Moisture Test
and Crop Improvement Consume Most of Time at Fourth
Annual Convention Held in Chicago

Summers, Ambia; W. H. Isenhour, Fountaintown; J. C. F. Martin, Lafontaine; C. S. Reed, Tipton; John J. Putnam, New Point; C. W. Hinkle, Rushville; J. W. Waltz, New Palestine; A. B. Cohee, Frankfort; Chas. Sharp, McCrawsville; H. H. Deam, Bluffton; P. J. Wolfram, Thornton; F. Evans, Raub; A. M. House, Hobbs; John H. Shine, New Albany; Thos. K. Mull, Manilla; Chas. Haywood, New Richmond; D. M. Blackmore, Greensburg; Bennet Taylor, Lafayette; J. N. Walker, Wheatland; Fred L. Hunt, New Richmond; F. F. Scott, Scircleville; E. M. Fisher, Needham; W. D. Thurber, Terre Haute; S. A. Clark, Frankfort.

IN THE NEBRASKA GRAIN BELT

The elevator of Fritz Beckord at Utica, Neb., is one of the most successful country houses in the entire state. It has a capacity of 30,000 bushels, divided into large bins, and has a modern equipment in every particular, including Howe Wagon Scales, hopper bin scales and a car loader. The elevator is driven by a 15-horsepower gasoline engine.

Mr. Beckord, the owner of the elevator, is one of the pioneer business men of this section of Nebraska, and assisted in starting the town of Utica, thirty-five years ago. At that time he was not in



ELEVATOR OF FRITZ BECKORD, UTICA, NEB.

the grain business, but in 1892 he entered this line in partnership with H. W. Ragan. Two years later Mr. Ragan died and was succeeded in the firm by Fred Beckord, oldest son of Fritz Beckord. The two Beckords, father and son, worked together for five years in building up their grain business to big proportions, but in 1909 Fred Beckord went to Canada, where he has some extensive land interests, and M. R. Beckord, second son of Fritz Beckord, succeeded him in the grain business. M. R. Beckord is now manager, and to his keen foresight and good business judgment is attributed a great deal of the success which the elevator has enjoyed during the past few years.

Situated as it is in what is considered not only the best grain belt in Nebraska but also one of the best in the United States, the elevator has good reason to be prosperous. Its territory covers an area of 72 square miles and the annual shipments of grain reach a total of 255,000 bushels.

With their bins filled to greater capacity than for several years past, the grain elevators of Minneapolis are carrying 22,500,000 bushels of grain in storage. A year ago at this time stocks were in the neighborhood of 20,000,000 bushels.

A full representation from the nineteen different grain exchanges which are members of the Council of Grain Exchanges, gathered in the Red Room of the Hotel La Salle, Chicago, for the fourth annual meeting of the body on January 16 and 17. The first session was called to order by President J. C. F. Merrill at 2:30 p. m., on Wednesday, January 16. Immediately after the call of the roll by the secretary, the president delivered his annual address, which was as follows:

Since our June meeting, at which committee reports were made covering the activities of the Council during the first part of the year, nothing outside of routine work has required special attention of the organization as a whole. The work of the several committees has progressed in an orderly manner, except that of the Publicity Committee which has been obliged to suspend activities for want of funds. The publishing a copy furnished by this committee has been secured since the appropriation of \$500.00 was exhausted by collaborating with the Crop Improvement Committee in securing publication of such matter as could be accomplished without increased cost. Increased revenues are needful to carry on the work of publicity, and to make it possible to pay the secretary's salary.

The Hall-Baker case was completed in the United States Circuit Court of Appeals, the decision of the lower court being reversed and the shipment of grain in interstate commerce graded by state authority once more made safe. The court declared in its opinion that the "Pure Food and Drugs Act was not enacted to catch and punish merchants who are conducting their business by customary and approved methods with no intent to deceive purchasers or to injure the public health for the mistakes of third persons over whom they have no control, nor for trivial errors of their own, which at first blush may seem to bring their action within the inhibition of the law but in reality they violate neither its letter nor its spirit."

The legal expenses of this case were apportioned among the constituent members of the Council, thus dividing what would have been a heavy burden if borne by one body alone, into portions easily provided by each Exchange. The secretary's report will give in detail the apportionment of the costs.

PENDING NATIONAL LEGISLATION.

Legislative matters at Washington have received due attention, the Pomerene Bill of Lading Bill being the one which has received the greater attention, both in the Senate and House committees and through personal contact with members of both houses. It is a matter of tremendous importance to the public, and to the shippers of farm products and to all who practice the using of Bills of Lading as a means of controlling title of property shipped and of helping to finance their business. This Bill has passed the Senate and is in an advanced position in the House. The Bills of Lading Committee will report on it more fully with recommendations.

I call the attention of members to H. R. 3010 in the House of Representatives, introduced by Mr. Cary, which was referred to the Committee on Interstate and Foreign Commerce April 10th, and reported to the House by the Committee August 2nd, 1912. "To prevent discrimination by the mailing or otherwise forwarding by telegraph or telephone, or telegrams or messages by telegraph companies when same are accepted for telegraph, i. e. transmission by wire."

The press of business during the remaining six weeks of the Sixty-second Congress with practically nothing done with the eleven hundred millions of dollars of appropriation bills, and other highly important business, places the Bill of Lading Bill and the Telegraph Bill in great jeopardy. I suggest to all members of the Council, and to such guests as may be present, that effort be put forth in some systematic order to push the bills to enactment at this session of Congress. Inspired communications to representatives and senators, when it is evident that such be the fact, have practically no effect at Washington, but expressions of a genuine desire are among the most potent of influences. Therefore, stereotyped forms should be avoided. Letters from a number of the constituents of each senator and congressman, making known the earnest wish of the writer, should be secured by the members of our constituent bodies to the extent of having all congressmen in their respective states thus informed of the desires of the people. Congressmen and senators can not be expected to interest themselves spontaneously, but will be always found responsive to a general wish of those whose votes put them in office. Therefore, careful attention by those in position to do so, to making known to our representatives at Washington the general desire of the people without respect to locality, is the only effective means at our disposal for securing these laws, and no loss of time should be permitted in view of the near by date of the end of the present Congress.

NECESSITY FOR GOOD BUSINESS ETHICS.

With these words of report of our car activities since our last meeting and of suggestions for the future, I ask attention briefly to a subject now of

widespread interest to the American people in its application to the business of handling agricultural products. In an address I made in January, 1911, I spoke of the great forces making for a higher system of business ethics, and asserted then that it would prevail. I also asserted that this modern ideal relative to the moral obligations of those who serve the public is that they shall, in rendering such service, be entitled to receive one fair and reasonable profit, and that then they shall become trustee for and protect the rights of those with whom they have business transactions. The enunciation by the President-elect of the United States in this city last week, in almost the same language, as indicating in part the policy of his coming administration, clearly proves the certainty of the opinion of the public in its requirements of all business men in their relations with each other. To recognize this is but to read the handwriting on the wall, that we must recognize the great forces making for a broader horizon, a larger sympathy, and a high system of business ethics. The application of these demands to the grain exchanges' business, I am sure has been and will continue to be recognized by their members, not only because of the imperative demand itself, but also because of the inherent desire to rise to the level of high ideals in living our business lives. This is an age of freedom as well as an age of investigation of truth, but what we are pleased to call freedom is not everywhere identical with truth and right.

In one particular it is the determination to be governed by just and equal laws; in another, the despising of all laws but those of one's own imagination and self-interest. In other words, the recognition of the demands of the public and graceful obedience to them means smooth sailing for the Exchange or Board of Trade craft. Because of the fact that ownership of farm products imposes the risk of ownership of fluctuating commodities from time of production to time of need, and because there is a distinct class which desires to assume the risk of ownership which the merchants and holders may desire to eliminate, hedge trading and speculation becomes a large factor in the merchandising of our crops; for as a generality, there can be no hedge trading without speculators to take the risk. The benefits of it by the very nature of things are out of sight of the public, and as it plainly witnesses many of the disasters, it blames the exchanges as being the cause of them. That most of the blame visited on the exchanges is not deserved can be confidently asserted.

WHAT PROMOTES CRITICISM.

It then, in my opinion, may easily be seen that the grain and commodity business merchants generally, on the Exchanges and off, in matters pertaining to sales for future delivery, or for immediate delivery, on spot or for shipment, may easily recognize that their highest attainments ethically and commercially lie in the direction of clean practices, of a square deal always, of quickly brushing off the barnacles. As before said, to secure for himself a clean, fair profit on every trade is every man's duty; more than that, the public says shall not be taken. To get all the business obtainable from those qualified to speculate, is equally justifiable, and the public will not object. To seek by lurid correspondence, to excite the desires of the weak to imitate the strong, with its almost certain result of disaster, the public has decreed shall stop. The advent and growth of this feature of the business was insidious, and brought criticism on the exchanges. When its character and effect was fully recognized, I am glad to say, the Exchanges stamped it out.

Fundamental conditions have changed radically in the grain business since 1896. Changed methods are enforced by changed conditions. Conservation of our business is well worthy of our thought and of our endeavors. It can be realized only by education. To educate Exchange members is comparatively easy; to educate the public is a big job. It can not be accomplished in a day. Persistence in the work, coupled with freedom from offense by the Exchanges, or anything having the appearance of it, will in the end be successful. Therefore, this and kindred bodies have addressed themselves diligently to the task.

Offensive and injurious legislation is constantly threatening us, and it has been given new impetus by the recent Pujio Committee investigations of the New York Stock Exchange, and while it is improbable that anything can be accomplished during the remaining six weeks, in view of the great mass of business to be completed, including eleven hundred million of dollars appropriation bills, yet accidents and the unexpected are always to be reckoned with and should not be lost sight of, and, therefore, the possible may appear any day as the probable.

I trust by these suggestions I have not imparted the least idea to any of you that I shrink from the most powerful searchlight upon our business. On the other hand, I would solicit it. Through the veil of the future, dimly hidden as it is, I see the legitimate exchanges growing stronger in public confidence and taking their place among the most stable and highly respected institutions of our country.

A motion by C. A. Magnuson that the report of the president be printed in pamphlet form and supplied to each Exchange belonging to the Council, enough pamphlets being printed to put one in the

hands of every individual member of the various Exchanges, was unanimously carried.

Secretary J. R. Pickell then read his annual report which dwelt at considerable length upon the work accomplished by the body during the past year. Among other things the report said:

We have been agreeably pleased to welcome the Cincinnati Chamber of Commerce to membership, under the Class B provision of the Constitution, providing for one voting delegate from the Exchange at a cost of \$100 per year for membership dues.

It seems we will not be able to increase the present membership to any great extent unless some provision is made to eliminate the fee of \$100 for those smaller Exchanges which withhold their direct support from the Council, solely, as I believe, from a financial standpoint.

It might be the part of wisdom to reduce the affiliation fee for the smaller Exchanges under a special Class C membership, or to allow them to affiliate without cost and without a vote. Many Exchanges obviously cannot afford to pay \$100 for a membership in this organization. Any action to be taken upon this suggestion, however, would necessitate the amendment of the Constitution and By-laws, and it could not be acted upon before the June meeting. Recommendations may be made at this meeting.

Attention was directed in the June report by your secretary to the interpretation of the Pure Food and Drugs Act by the Bureau of Chemistry, and to the part which the Council took in initiating the protest against the interpretation of the Act. The activity of the Council in this respect since the June meeting has only indirectly referred to the Act, as it was involved in the Hall-Baker Grain Co. case. The Council, at the Milwaukee mid-summer meeting in June, 1911, assured the Kansas City Board of Trade that if it would undertake to appeal from the decision of Judge McPherson, in the United States Circuit Court, to the United States Circuit Court of Appeals, it would assist in bearing the costs of the appeal. The case has since been tried and won in the United States Circuit Court of Appeals. The total costs in connection with the appeal amounted to \$3,732.45. Appropriations were asked from the Exchanges affiliated with the Council, and without a solitary exception, the Exchanges which were requested to appropriate funds promptly responded, so that the expense item of \$3,732.45 was immediately liquidated.

It is apparent to all who are familiar with the difficulties in connection with favorable publicity for the Grain Exchanges that the enmity against them seems to be largely in the minds of the producers, who, as we well know, are the greatest benefactors of the speculative system of grain distribution. Your president has pointed out the necessity of continued education, and your Secretary possesses knowledge of some very valuable publicity work which could and should be done, but in order to intelligently carry on a campaign, a financial appropriation will necessarily have to be made at this meeting which will provide adequate funds to be paid proportionately by the constituent members of the Council.

The results above outlined do not include the excellent work which has been done by the Crop Improvement Committee of this Council. We have been called upon for information from all sections of the United States on various questions relative to the operation of the Grain Exchanges. We have even been invited to assist in organizing an apple and potato exchange, in order that those commodities might be marketed at a minimum of cost between the producer and the consumer as in grain.

I wish to respectfully recommend that a permanent Legislative Committee be provided for at this meeting. We have only one permanent committee, that on Uniform Rules, and as one of our most important functions is that of promoting favorable legislation and protesting against inimical legislation, it would seem advisable that this Council be at all times provided with a Legislative Committee, to co-operate with similar committees in other organizations.

Upon motion the secretary's report was accepted and ordered placed on file, following which Treasurer John W. Snyder of Baltimore submitted the annual financial statement. This was received and referred to an auditing committee appointed by the president.

COMMITTEE ON BILLS OF LADING.

Since the report of T. E. Cunningham, chairman of the Finance Committee embodied practically the same things as the treasurer's report it was omitted, and in the absence of Mr. England, chairman of the Bill of Lading Committee, W. M. Hopkins read the report of that committee. This report, in part, was as follows:

Pursuant to resolution passed at the June meeting of this body, held at Cedar Point, O., your Committee appeared before the Interstate Commerce Committee of the Senate in favor of the Pomerene Bill, now known as Senate Bill 957, and prepared resolutions which were transmitted by your President to each member of the Senate. The bill passed the Senate on Aug. 12, 1912.

Your Committee recommends:

First: That the same procedure be followed in advocating the passage of this bill in the House as was had when it was up for consideration before the Senate, namely, we should appear before the House Committee on Interstate and Foreign Commerce in favor of the bill, and also advocate its adoption by communicating direct by letter with each Representative,

as was done when this measure was before the Senate.

Second: That each Exchange member of this Council prepare and forward to each Representative a communication of similar import. This is important because it is necessary that the Representatives be impressed with the fact that there is a widespread interest in this measure, and communications coming from different sections will be of great value in securing favorable consideration for the measure.

Third: That when the Pomerene Bill is passed by the House and becomes a national law, we should continue to advocate its adoption in States where it has not as yet been adopted.

The Pomerene Bill is the only bill proposed that embodies a complete code of law on bills of lading, and, therefore, is the bill that we want.

I might say that there were two primary difficulties that confronted us at the outset in the matter of bill of lading legislation.

First: There was no national legislation on this subject.

Second: There were no uniform State laws.

If the Pomerene Bill should pass the House the first difficulty will have been overcome, and we will then have national statutory regulation governing bills of lading.

The second difficulty has been met to a certain extent by securing the adoption of the Pomerene Bill in ten different States.

As above recommended, this matter should be pursued further among the different States, after we secure the national legislation, until this measure



J. C. F. MERRILL, CHICAGO
Re-elected President.

has been adopted by all States. When this is done the Interstate Commerce Commission will then be in position to frame a uniform bill of lading predicated its terms upon the law thus established. The business interests of this country will then have secured what we long have sought, namely, a bill of lading that is uniform in its terms and applicable to both state and interstate shipments, that is acceptable to bankers as an instrument of credit, and imposes upon the carrier its legal liability for the property described in such bill of lading.

The Interstate Commerce Commission has called for information as to the operation of and objections to the present uniform and standard bills of lading. Your Committee has filed a statement with the Commission setting forth its objections to the present bills of lading, and will appear before the Commission at the hearing which is to be given, the date of which has not yet been set. It will be recalled that this Council authorized your Committee at your June meeting to appear before the Commission when this hearing is given, and we will proceed accordingly.

UNIFORM RULES COMMITTEE.

H. L. Goemann, chairman of the Uniform Rules Committee, then read the report of his committee. This report said:

Through the courtesy of the Board of Directors of the Chicago Board of Trade I was asked some months ago to appear before them when the chairman of their special committee, Mr. Gerstenberg, made a report on cash grain rules, and although I tried my best to convince the Board that they ought to pass a rule that all contracts for cash delivery grain for future shipment contain a clause that margins can be called under the contract, I regret to say that the Board did not agree with me and voted against this proposition.

It seems to me that as this was not to be an arbitrary call for margins, but simply the arbitrary insertion in the contracts that margins could be called under that contract (which in my judgment is simply good business and the protection the trade needs), and furthermore, in conversations with members of various Chambers of Commerce I found that they did not desire changes in their rules. I therefore have become somewhat discouraged with trying to bring about uniformity in the trade rules between exchanges.

I do not believe that the smaller cash grain mar-

kets will want to take the initiative in promulgating rules, or to have rules which will not permit them to have some advantages to attract business to them, for Chicago being the largest grain market in the world they would stand very little show by having in effect rules and regulations which would, in their judgment, give the advantage to the larger markets in trading. I find, too, that the markets are always looking out for themselves and are only willing to change their rules so as to get the business to their own market; this, of course, means that the general markets will fight any change in rules that will affect or interfere with their business.

As an illustration a certain market changed its grade on No. 2 Rye from 55 lb. test to 54 lbs. in order to give that market an advantage and largely to favor one firm. In a number of markets the inspection of the grain is not in line with the uniform grade rules, and being easy in their ingrades secure considerable business at the expense of competing markets which hold the grades to the uniform rules.

In addition to the old subjects which have been discussed, the shipping time (which varies slightly from the Grain Dealers' National rules); the margin call; the interest charge on purchases; telegraph and telephone charges on messages sent "collect" on inquiries; that all contracts contain a clause that both parties to the contract be compelled to arbitrate differences in the market on the basis of which the trade was consummated, we recommend that uniform rules be adopted as to the method and manner of adjusting defaulted or delayed shipments, or over or under shipments of grain on contracts made for shipment.

There ought to be some general rule whereby the custom of guaranteeing grain to arrive cool and sweet would be uniform, and there ought to be some limit as to the point to which the grain is guaranteed. It seems to me that the eastern buyer who bills his grain to a diverting and holding point should be willing to have the guarantee on the grain end at such point. Inspectors should be placed at such hold points so that the western seller will know where his liability ceases, and will not be compelled to have the grain guaranteed to interior points on all branches of roads where it is impossible to have the cars applied at market differences. When grain is refused it must be reshipped at local rates to some other point, and in addition must be sold at current market values irrespective of original contract. It would be just as easy for the distributing buyer or jobber to sell his grain basis of inspection at junction point (if that was the general rule) as to guarantee its condition at final destination. This would mean that if the car was not right when it reached the junction point it could be diverted to some market where it could be disposed of at a minimum loss.

I believe that all these points ought to be covered by uniform rules in all markets for unless rules are uniform as well as grades of grain, it throws the advantage in trading to those markets whose rules and grades favor the buyer or seller as the case may be.

Considerable difference (probably the most) exists between the markets that cater for eastern business and possibly these recommendations do not appeal so strongly to western markets where rules are more uniform due to different manner of doing business.

Following some discussion on this report, a motion made by Charles Kennedy to the effect that the secretary obtain an expression of opinion from the various Exchanges regarding this important question was carried.

In delivering the report of the Publicity Committee, Chairman J. C. F. Merrill said in part:

In view of the secretary having covered the ground there is very little to say for the Committee on Publicity.

The Council may be a very potent factor for good in the various departments of exchange activity. To obtain the publication of this matter in 1,500,000 publications is an achievement.

The great importance of education may be easily recognized, and it cannot be over-emphasized. The Exchanges may feel that it is just intangible enough to pass it on from day to day until nothing is done. Before this meeting adjourns the most useful thing that could be done would be the provision of additional funds. To be without the "sinews of war" is of course to make no progress, and to be without funds with which to carry on the publicity work is, of course, for that committee to make little progress.

I think you will agree that the securing to the public of the matter that has been prepared in something like a million and a half of issues, is an achievement, and perhaps some of you have wondered why with \$500 appropriated that the expenditure of less than \$300 should have exhausted the fund. It was because there was no special effort made to raise funds for this specific use and the preparations and the unavoidable expenses have amounted to more than the income.

The introduction of the bill by Senator Cummins may be passed over as not very threatening. I doubt whether his own constituents would stand for it; and if passed it would be speedily repealed. His own constituency could not hedge their No. 3 corn. The majority leaders in Congress have said that legislation would not be renewed at this session of Congress.

UNIFORM GRADES COMMITTEE.

E. H. Culver, chairman of the Committee on Uniform Grades, submitted the following report:

After a great deal of correspondence with Mr. McCabe of Duluth, and with Mr. Eva of the State Inspection Department of Minnesota, we tried to

standardize and put the grade of No. 1 Northern and No. 1 Hard Spring on a percentage basis.

Mr. Eva and Mr. McCabe laid this matter before the State Board of Appeals, but they refused to change the present basis of inspection.

As chairman of your Committee and a member of the National Grain Dealers' Committee I tried to straighten up the uniform grade rules, as per the request of the Southern, Eastern and Western markets of which amendments I have a copy. They were defeated at the Norfolk convention, and there has been practically nothing accomplished this year.

I tried to place the grade of No. 3 corn on an 18 per cent basis, whereby it would be a safer commodity for both buyer, seller and elevator man to handle. As the grade now stands, we have only a three months' grade, that is, December, January and February, and the Southern markets have begged for the past five years for us to try and make this grade, and I promised the gentlemen that it should go before the convention, and was instructed at the Omaha Convention to bring in these amendments; the same were published four months before the convention, so that every market in the United States had a chance to fight for them if they so wished, but the country did the fighting, and the markets stood pat. I have a copy of these amendments, and if the Council wishes, I will submit them with this report.

I regret to report that the Uniform Grades Committee has made little progress; and that some exchanges that did adopt the uniform grade rules are not living up to them.

I have about come to the conclusion that this Uniform Grades Committee is a farce.

President Merrill then appointed a nominating committee consisting of C. F. MacDonald, Charles Kennedy, W. A. Hottensen, J. C. Murray, R. J. Thresher, C. A. Magnuson, H. L. Goemann, and E. P. Peck.

THE MOISTURE TEST.

It was announced by the chair that since the business had been disposed of so expeditiously, some of the evening's program would be taken up. Dr. J. W. T. Duvel, of the Bureau of Grain Standardization, Washington, D. C., was then called upon for an address. Dr. Duvel spoke as follows:

I am not here to deliver an elaborate address, but to meet with the men who handle the grain. We have tried to be fair and have had the co-operation of the grain trade, and I ask that this co-operation be continued.

We will have the standards ready for the handling of the corn crop of 1913. We wish to make these standards workable.

I don't see much difference whether percentage of moisture permissible is 18 or 17 per cent, if all handle it on the same basis.

It is not alone uniform phraseology but a question of the uniform interpretation of the rules. For instance, there are many ways of arriving at the weight per bushel. When it is a point between buyer and seller the moisture test should be made in a uniform manner in all cases. It is true that the test is simple and can be made by anyone; but the test should be made by an honest man, and it makes a difference according to the depth of the thermometer and the time taken to heat the sample.

Moisture is one of the most variable factors in a chemical test, therefore we have adopted an apparatus as standard. This has been patented and the patent donated to the public so that anyone can use it.

We will find variations of moisture in different parts of a carload of grain, and the only check on this is to employ a uniform method of testing.

Upon the conclusion of Dr. Duvel's remarks, Charles Kennedy of Buffalo said:

I am very glad to have a chance to discuss some of the phases of this question which the doctor has presented to us. Our own market has suffered a great deal from or on account of the moisture test, and my thought is that the trouble was that it was two-fold. In the first place a moisture test had been determined upon as determining the grade instead of as being an aid to an inspector to determine the grade. Now, there is a vast distinction between these two statements. When you establish a point where the moisture test determines the grade that is final; where you use the moisture test as an aid for the inspector to determine the grade, you have got something that is quite different, and my thought is that the Trade has run away with a good idea.

The doctor has said that under certain conditions you have a variation of two per cent of moisture. He also says that under certain conditions you have great difficulty in getting a true sample of grain to be tested. Therefore, you not only want to devise some proper method of gathering these samples, but it seems to me you want to be just a little bit careful about putting a definite moisture test as determining the grade instead of an aid to the inspector to determine the grade. We have had so much trouble in our market in regard to this question because of the differences that were constantly arising.

We will say that Chicago, for instance, shipped us some corn and said it was 18 per cent moisture, we get it down to Buffalo and it is 19 per cent or 19.5 per cent. Now it meant that there was a difference, due to many causes. It might be to the lack of proper operation of the apparatus on the part of the operator in Buffalo or on the part of the operator in Chicago, it doesn't matter which, it was there and it gave us a great difficulty. Now, because of that I took occasion to try to straighten out our difficulty.

I have some data here that I think will be rather startling to the organization here, and I think Dr. Duvel will be glad to hear the results. I formulated a series of questions which I asked the several Exchanges, and I have here the questions as asked and the replies which I received from the Exchanges.

Mr. Kennedy then proceeded to read at length, the replies which he had received from the several Exchanges, most of which indicated a wide variance in the methods of conducting the moisture test. The information contained in his report called forth numerous protests from the members present and precipitated immediately a very warm discussion.

Mr. Goemann said that he thought the investigation of Mr. Kennedy a good thing and showed the necessity for the uniformity the body was working for. The great point he neglected to find out was how the corn was brought from the yards, from the car into the testing room. The great bulk of the trouble is there, because it is so important that the grain should be brought in an airtight container. But an airtight container is a bulky process and in any market handling a great many it may become burdensome, and so the corn is often brought from the car in a cotton bag to the testing room, and really it makes a great variation in the tests and that would bring about the difference in the grading between here and the seaboard, for



TREASURER JOHN W. SNYDER, BALTIMORE

instance, which they complain about. He recalled a shipment from Mansfield, Ohio, to Baltimore where the corn was tested by the buyer in the Chamber of Commerce, and in no case was there a variation found in the corn (and it was No. 3 and No. 4 corn) of over .2 per cent and .3 per cent, showing that corn does not gather a great deal of moisture when it is loaded.

Mr. Snyder: There is an old saying that "the proof of the pudding is in the eating" and also that "a burnt child dreads the fire." I have eaten the pudding and I dread the fire. I know from experience that such has been the case that corn has taken on 1½ per cent to 2 per cent from Chicago to Baltimore. I did not mention Baltimore before. I mentioned Buffalo, a short haul. I think Mr. Kennedy will bear me out, and if there are other Buffalo receivers here, that they will bear me out in the statement that there are times when the climatic conditions are as they are today, when corn has taken on from one and a half to two per cent moisture in transit. And I feel while I am on my feet, I feel that this Council owes Mr. Kennedy a vote of thanks for drawing out the replies he has placed before you, whether they are right or whether they are wrong.

Mr. Goemann: Dr. Duvel, you made tests of corn shipped from Chicago to Baltimore, what was the increase of moisture between the two markets?

Dr. Duvel: The increase of moisture between the time of shipment and the time of arrival at destination is an interesting proposition. If corn arrives at destination in good condition we have not found any increase in moisture content, that is, no appreciable increase. If the corn is weighed, if you have definite weights at the time of shipment and the time of arrival at destination and it is shipped under bad conditions, that will perhaps show a slight increase, due to deterioration. From observation, however, weight will usually show a small normal variation. The variation in the weight itself is greater than the increased moisture

content, as really we find from the point of shipment to the point of destination there is a natural shrinkage, due to evaporation. We almost invariably find, given a full car of corn in good condition, it will show from two to three per cent less moisture than at the point of shipment, showing evaporation. On the other hand, we do find frequently corn arriving at destination showing 1½ to 2 per cent more moisture than at the time of loading, due, however, to deterioration in transit, and as soon as you get deterioration in transit you find the same condition as if it was piled up in the woods or the back yard: the corn begins to rot and the increase in the moisture content is due to the breaking down of the starch and other food products in the corn. I think that is the case where we find an increase in the percentage of moisture content at destination, rather than that it absorbs moisture from the atmosphere.

Mr. Kennedy: Isn't it within the range of possibility that a car of corn arriving at destination may have started to deteriorate sufficient to acquire some moisture, and it is very possible for the inspector to get that very portion of it rather than an average of the whole car, and he would therefore get an honest test, but an entirely different one from what the average of the car would show?

Dr. Duvel: If I understand your question correctly, I think perhaps the proper answer is that the inspector to grade this given car is usually there on the ground and is supposed to inspect the car. If there is any corn in there in that car that shows deterioration that is the corn that determines the car and it would naturally show a high moisture test.

Mr. Kennedy: My thought is, quite a considerable time elapsing between the first indication of germination and germination carried to sufficient extent to require the making of an inspection—there is quite a period there where some of this moisture would show, for instance when there are sudden and marked changes in temperature.

Dr. Duvel: We usually do not find that. When the temperature begins to decrease due to fermentation, if that takes place within a few days—the temperature at this season of the year will jump from 70 degrees up to 130 degrees in four or five days; I have seen it go to that in three days, and that is the point where you get deterioration.

Mr. Vincent: May I ask Dr. Duvel, who has been talking about moisture test, if he can tell us something about acidity, which comes with moisture tests, since it is right along the same line?

Replying to this question, Dr. Duvel said:

I might say a word or two concerning acidity. You are all more or less familiar with the acidity test. High acidity that shows in damaged corn, as a number of the Southern states have been buying their corn on that basis—or rather condemning it when it shows high acidity. During the past two years we have done considerable work along this line and just before I left, day before yesterday, that was all brought together by my assistants who have been working on that, and it shows some very interesting results. I believe we are going to be able to say what acidity should be in good sound corn, at least in the grades of number 3 and better; and this acidity test will be of value, of exceptional value to anyone who is going to store corn for a considerable length of time.

Knowing the acidity, knowing the moisture content and knowing the temperature of corn when it goes into the bin, we will almost certainly be able to tell whether that is safe corn for storage to carry over late into the spring months, or any length of time, and the same thing is true in shipping. It is not our intention to have this acidity test apply to all corn. I believe, however, it will be of value in the storing of corn, and also cases of an appeal where there is a question whether it is one grade or another, we would make the acidity test and determine the soundness and know absolutely what grade of corn should go in.

We also find that the acidity test compares very closely with the germination factor, that is not of very much importance, perhaps, at least in considering the use of commercial corn. In this connection, while I am on the floor I will also say that we have done a considerable amount of this acidity work in co-operation with the Chicago Board of Trade and the Inspection Department, and it has been very gratifying to me, as I glanced over the table before I came away to know that the results of our acid test compared very favorably with the results of the inspectors' tests. Almost invariably where an inspector marked a car down on account of an excessive amount of damage test samples show a high acidity. There is not a very close co-relation between acidity and moisture content. Of course with high moisture the corn will be sure to dete-

riorate in a short time and then the acid comes up very rapidly.

Upon motion a vote of thanks was tendered Mr. Kennedy for making the investigation, after which President Merrill announced that all the delegates were asked to be the guests of the Chicago Board of Trade at a dinner in the Hotel La Salle, at 6:15 p. m.

J. C. Murray made a short announcement of the expenditures of the Crop Improvement Committee during the year and stated that about \$15,000 would be required for the coming twelve months.

The meeting then adjourned until 7:30 p. m.

THURSDAY EVENING SESSION

After calling the evening session to order President Merrill introduced Edward Andrew, the newly-elected president of the Chicago Board of Trade. Mr. Andrew in a few well chosen remarks extended the greetings of his organization to the Council of Grain Exchanges and assured the latter of the utmost co-operation on the part of the Chicago Board of Trade.

Frank T. Delany of Chicago then delivered a comprehensive address upon "The Telephone and Telegraph Situation." During the past year Mr. Delany was chairman of a committee of the Receivers' Association of the Chicago Board of Trade which was appointed to investigate this question and thus was able to discuss this omnipresent problem from a thoroughly practical standpoint. After reviewing the situation in all its phases, Mr. Delany closed with the following question for the consideration of the Council:

Is the telegraph service a commodity to be bargained for in quantities to suit the purchaser, or is it a public service that is to be within reasonable physical limitations available to all and equal to all?

Mr. McCabe inquired whether in referring to private wire service Mr. Delany had in mind the private wire service or the private wires used for giving quotation service between the different markets.

Mr. Delany responded that he believed the quotation service would come under the head of news. The law which placed the telegraph companies under the Hepburn Act specifically excluded from the tariffs of the common carrier news wires, and quotations would certainly come under the head of news.

Chas. B. Riley, secretary of the Indiana Grain Dealers' Association, delivered an interesting address on "Uniform Weight and Inspection Certificates."

The president then called upon Mr. Williams, local manager of the Western Union Telegraph Company, who was present, for an address, and Mr. Williams undertook to reply to some of the statements made by Mr. Delany. He assured the members that his company was doing its best to improve the service and asked that a copy of Mr. Delany's address be sent him, so that it might be answered in detail.

A brief discussion on the telegraph question then ensued, following which the delegates again returned to Mr. Riley's address.

Mr. Goemann moved that the Council pass a resolution endorsing Mr. Riley's suggestion in regard to uniform certificates of weight, and asking Mr. Riley to furnish the Secretary with sufficient copies so that they could be mailed to the different Boards for adoption. Mr. MacDonald seconded the motion, the wording of the resolution to be left with the secretary or Mr. Goemann.

After a brief discussion participated in by Messrs. Goemann, Riley and MacDonald in regard to indicating membership in Exchanges on letterheads, the fact was brought out that occasionally some one who was not a member of any Exchange might indicate to the contrary on stationery, yet such action was a violation of law and would come under the head of any other fraud perpetrated for the purpose of obtaining value. Mr. Riley expressed himself as decidedly of the opinion that the general result obtained from indicating on stationery membership in Exchanges, etc., would be of great benefit, and no objection to doing so was urged by any one.

The report of the nominating committee was read by its chairman, J. C. Murray, and the following officers were unanimously elected: President, J. C. F. Merrill, Chicago; First Vice President, George H. Davis, Kansas City; Second Vice President, C. A. Brown, Minneapolis; Third Vice President, E. Pfarrius, New York City; Treasurer, John W. Snyder, Baltimore; Executive Committee, John McCabe, Duluth; Chas. Kennedy, Buffalo; L. W. Forbell, New York; W. M. Bell, Milwaukee; H. L. Goemann, Toledo; E. M. Flesch, St. Louis.

The new officers were all called upon for short addresses, and in the absence of some, their colleagues responded for them. John L. Messmore of St. Louis rounded up the evening by a number of splendidly told stories.

The meeting was then adjourned until Friday afternoon.

FRIDAY AFTERNOON SESSION

At the opening of the Friday afternoon session, C. A. Magnuson was given the floor and introduced a resolution which had been presented twice at previous meetings without definite action. This resolution was as follows:

Resolved, That the Council of Grain Exchanges recommend to individual exchanges constituting this body, the adoption of the following:

Resolved, That offers to buy or sell large quanti-



J. C. MURRAY, CHICAGO
Chairman of Crop Improvement Committee.

ties of grain or seeds for future delivery with the limitation requiring the buyer or seller to purchase or sell the entire amount offered is not permissible and is hereby forbidden. All such bids or offers to buy or sell grain or seeds must be open for acceptance by any member in lots of 5,000 bus., or multiples thereof. And be it further

Resolved, That the making of pretended or fictitious offers to buy or sell futures in pit trading is uncommercial conduct and is hereby forbidden; the purpose of this resolution being to put an end to all bids or offers which are not made in good faith, and intended to be carried out if accepted.

After reading the resolution a motion was made for its adoption as read and without any discussion the motion was carried.

CROP IMPROVEMENT.

J. C. Murray, chairman of the Crop Improvement Committee, then addressed the Council as follows:

The Crop Improvement Committee was formed some three years ago with two objects in view, the first and most important being the larger yield of better grain in our farming territory. The second was the idea that the grain trade might, with advantage to itself, bring into closer relationship the farming interests and producing interests of the country. The business of the grain trade being dependent on the yields, the surplus yields of our farmers, the interests of the producer and grain dealer are alike, and a closer relationship was thought desirable. It was deemed by the Council at that time that such work as we have undertaken, namely, to improve farming conditions throughout the country—would bring us closer to the producer and that our business would be more greatly appreciated by the country at large.

Since our last annual meeting the first important action taken by the committee was the campaign for improvement in seed corn, commonly known as

the "Testing of Seed Corn Campaign." The committee through Mr. Ball worked out a poster which was distributed perhaps more widely than any document of any kind, probably ever known in this country. I have never known of anything to be taken up so generally and by so many different interests as this little corn poster that was arranged by your committee last year. Our direct distribution through our office was something like 156,000 copies, but the indirect distribution is something that we have no record of, and can make no calculation. We do know, however, that it was largely distributed by wholesale grocers, dry goods houses, hardware houses, large manufacturing interests, and by practically all of the railroads operating through the grain belt. These posters were put up in the stations and distributed by the railroads in a very general way. Incidentally, I might say that the committee succeeded in putting the entire issue into circulation practically without expense to the Council of Grain Exchanges.

In addition to our seed corn campaign, we circulated the superintendents of schools throughout the corn belt, and we were very much pleased with the appreciation in which our suggestions were received. We found the students in the schools among our most efficient and interested allies.

Iowa is one of the most active states working on this crop improvement proposition. In that state twelve counties have perfected what we call our county organization plan, and there are now five counties which have completed their farm bureaus and employed their county agents. In that state we are also co-operating with the Iowa Corn & Small Breeders' Association. We have given some programs at their corn show. That association is working hand in hand with the Agricultural College at Ames.

Ohio in our judgment is the best organized state so far as supervision is concerned in America. There are already seven district supervisors appointed, and while only one county has completed its organization and made up its fund, there is a county association formed in nearly every one of the counties, especially in northern Ohio. I could go on with similar articles in regard to New York, Pennsylvania, Kansas, Oklahoma, way out to the Pacific Coast and as far east as New England.

During the past year the secretary has covered some 37,000 miles in attending meetings and the number of meetings attended is between fifty-five and sixty. The newspaper service is one of the most important branches of this work of this Committee. At present the service is furnishing each month, page plates in country papers with a combined circulation of nearly half a million.

Practically every railroad in the country is included in this work with us. One specific instance is the New York Central Road, which is working specially on the county organization plan, and has been instrumental in starting the organization of six counties throughout the state. Agents are instructed all along the line to take up the work, and it is carried out with a follow-up system that is equal to anything of that kind that has been put out up to this time.

Now one of the main features of the work of the Crop Improvement Committee has been the county organization plan, by which a specialist in farm work, duly accredited by the local state college, is appointed in charge of some particular county to take up the work with the farmers toward developing the yields and improving the producing conditions in that county. This county idea was first promulgated in New York State—Broome County. I think it is—some two years ago. It was shown to be of great interest to the farmers. It was appreciated to such an extent that we have adopted it as the best idea for maintaining this work. We can get along from year to year with our newspaper work and perhaps continue to have excellent success, but we have felt that something concrete, something substantial in the way of an organization should follow along after this newspaper work was done, and hit upon the county organization plan as the one definite plan, provided the proper man can be obtained to take charge of the individual county. Up to date I think some twenty-six counties have been organized. We have, however, applications from the country now amounting to 663 counties.

During the past year the greatest single item of advantage or impetus to the Crop Improvement Committee was the appropriation by the Sears-Roebuck Company of \$100,000 towards the county organization proposition. I say it is \$100,000. The appropriation is given in this way: \$1,000 to each county perfecting its local organization and employing and selecting its man, up to 100 counties. In other words, \$100,000 appropriated towards that work, with the further provision that if in their judgment the work in these 100 counties is satisfactory or reasonably so, they will increase this fund to \$1,000,000, enabling us to take care of 1,000 counties to the extent of \$1,000 each county.

As an indication of how the country is taking this up I want to submit a few figures on the financial side from the counties that have been organized. In 26 counties organized to date, the fund subscribed—that is, the counties with which we are working—there are many counties that are working on this plant that have not come to us for the \$1,000—but this we know. The amount subscribed in the 26 counties that have been organized, the amount subscribed towards the formation of these county organizations is \$109,900. The amount subscribed from the Sears-Roebuck fund is \$26,000. In addition to that the Government at Washington through its appropriation will probably furnish up to \$25,000 or \$26,000 more, making a total sum for the 26 counties enumerated here something over \$160,000. It is impossible to estimate the funds raised by the counties already organized and those as yet have not received financial aid from us.

Kansas Grain Dealers Meet at Kansas City

Reports of Committees Show Great Progress—Federal and State Legislation Discussed—
Grain Inspection, Railroad Claims and Relations of Carriers to Grain Trade
Chief Topics Presented by Speakers—W. C. Brown Is Re-elected President.

Part of our plan of operation at all times has been to keep in the closest possible co-operation with the agricultural colleges, agricultural institutions in the various states, as well as the Agricultural Department at Washington.

After Mr. Murray's report, Bert Ball, secretary of the Crop Improvement Committee, gave an account of the work and plans of the committee illustrating this with some interesting stereopticon views.

Frank H. Crowell then made a short address, saying that the crop improvement ideas which have been disseminated to the farmers proving that the Council is interested in the productive ability of the American farm, will do more than anything else to eliminate the unjust criticism of the Exchanges.

It was moved by J. C. Murray that the work of the Committee on Crop Improvement be continued for the coming year, and that appropriations by the Exchanges not less than the total amount furnished last year be furnished for another year with which to carry on the work. The motion was carried.

Mr. McCabe brought up the question of increased revenue to the general fund. The president stated that there were possibly some means of a little retrenchment in operating costs which the Executive Committee has in mind, which would help out the Publicity Committee. The president further stated that there was no motion before the house with respect to an appropriation for that committee, that it was made \$500 last year, but for reasons previously stated it was found that that amount was not available, and that he would like to have an appropriation for the use of that committee of at least \$1,000, with the provisions, perhaps, if it can be secured.

Mr. Arnot moved that the Publicity Committee be authorized to expense such amount of money as may be available after the expenses of the office have been taken care of. He stated that it would be well to let all be raised that can be raised, and simply offered the motion to authorize the expenditure to such an extent as would not put the Council in debt. The motion was carried.

Mr. Furlong moved that the members of the Council express their thanks to the officers of the association for their work during the past year, and requested permission of the president to put the motion. The motion was duly seconded and carried.

A vote of thanks was also extended to the Chicago Board of Trade for their entertainment of the Council on the previous evening.

The convention then adjourned.

THE ATTENDANCE

The various Exchanges belonging to the Council sent the following representatives to the convention:

Baltimore Chamber of Commerce:—John W. Snyder, J. C. Vincent.

Buffalo Corn Exchange:—Charles Kennedy, F. A. McLellan, W. H. Richardson.

Chicago Board of Trade:—J. C. Murray, S. P. Arnot, J. C. F. Merrill, H. N. Sager, E. A. James.

Cincinnati Chamber of Commerce:—C. E. Nippert.

Duluth Board of Trade:—W. J. McCabe, C. F. MacDonald, W. C. Mitchell.

Kansas City Board of Trade:—R. J. Thresher, D. F. Piazzek, F. G. Crowell and G. A. Aylsworth.

Milwaukee Chamber of Commerce:—W. A. Hot-tensen, E. J. Furlong.

Minneapolis Chamber of Commerce:—C. A. Magnuson, C. A. Brown.

New York Produce Exchange:—C. J. Austin.

Omaha Grain Exchange:—E. P. Peck.

St. Louis Merchants' Exchange:—John L. Messmore, Edward M. Flesch, N. L. Moffitt.

Toledo Produce Exchange:—H. L. Goemann, E. H. Culver.

Others present were W. M. Richardson of the Philadelphia Commercial Exchange; H. J. Wood of the Boston Chamber of Commerce; S. W. Strong, secretary Illinois Grain Dealers' Ass'n, Urbana, Ill.; Chas. B. Riley, secretary Indiana Grain Dealers' Ass'n, Indianapolis, Ind.; J. W. T. Duvel, in charge of grain standardization, U. S. Dept. of Agriculture, Washington, D. C.; and Prof. P. G. Holden.

The sixteenth annual meeting of the Kansas Grain Dealers' Association was held at the Coates House, Kansas City, Mo., February 11, 12, 13. There was the usual large attendance of Kansas dealers, besides a number of the larger grain men from the neighboring states of Nebraska and Missouri.

President W. C. Brown of Beloit, called the first session to order at 2 p. m., February 11, and introduced George A. Aylesworth, vice-president of the Kansas City Board of Trade, who welcomed the grain men to the city. In extending a very hearty welcome Mr. Aylesworth said:

It doesn't seem exactly fitting that the Kansas City Board of Trade should welcome the members of the Kansas Grain Dealers' Association. The Kansas City Board of Trade is only your servant, Kansas City itself is your town and it is not necessary for me to extend to you the key to the city for you already have it. A great many members of the Board can look back to the time when you didn't

curred with him in all he had said regarding the improvement of Kansas crops of grain. He then read his annual address as follows:

Gentlemen: I congratulate you at this time, reaching, as we do now, another mile-stone in the history of our association as well as in our lives and business careers. The past year has been one that has had its manifold blessings—its regrets at things we ought not to have done and at the many good things we have left undone. Old Mother Nature has been most kind to the great majority of us, blessing our communities with large and bountiful crops of grain, and, I hope, much increase to the bank account of each and every individual. It has been a year of bright success for the association and I hope the coming year we will see an advancement along all the general lines of trade.

We have all heard about the "Inspection" case and I presume all of you have known of its results by the generous return to your private exchequer of the unlawful fees retained by the State. In all about \$24,000 has been returned and couple this with the amount you received from the payment to you of the 100 pounds wrongfully taken from you and you will realize that stock in the shape of a membership certificate in the Kansas Grain Dealers' Association under the splendid leadership of our invincible Smiley, is better than stock even in a Farmers' elevator or a First National bank.

We have another inspection bill up before our legislature which provides for a reduction in the fees, making it optional with the shipper as to whether inspection shall be had or not and also making the State responsible for its errors, if it commits any, so that you will only have one inspection fee to pay instead of several as it sometimes happened under the old law. I had hoped to see some way devised whereby we might eliminate the one-man inspection department, as some of us know it is almost impossible to ship No. 2 wheat into some of the markets where inspection is controlled by one man, who, in turn is influenced more or less by the local miller, or millers. Kansas City has given us a practical demonstration of her ability to take care of this department in its well conducted sampling rooms under Mr. Ware. No, I do not presume that you have all been satisfied, but the work is done under proper conditions with a good light and a good force of men, far superior, to my notion, to the old way of inspection in the car, no matter by whom it is done. I do not care to throw any bouquets at Mr. Ware, but when a man has done his duty faithfully and conscientiously, as I believe he has, under present conditions, I think he should be given the glad hand and that we should wish him well. Taking into consideration all of the various methods employed by the different political parties to fasten upon the public a set of political parasites, it is well for us to commend the work of this particular department.

VALUE OF SCALE INSPECTION.

Our members are beginning to realize the value of the scale inspection department of the Association. A well balanced, accurate scale properly installed and kept in good condition is one of the best assets the country shipper can have. There is only one way to have them and that is to have right and there is only one way to have them right and that is to have them looked after by a competent scale man. I know of one scale that cost the owners more than \$3,000 before they found out just where they were and in the meantime threw suspicion and discredit on their competitors. I would like to see the territory organized into districts, a competent man put over each district and the hopper, automatic and wagon scales inspected thoroughly at least once every six months. It is the best money you can spend.

While we are touching on the scale proposition, it might be well to say that some of the interior mill and elevator weights are mighty bad. At one point, and it is quite a large milling center, the railroads are considering the advisability of refusing to settle for freight on the unloading weights—it is losing them too much money. How about the country shipper who gets caught in the toils of these fellows? I hope we will be able to devise some ways and means whereby the Association by its organization can put every crook out of business. Quoting from the address of the Secretary of the Michigan State Millers' Association held at Lansing, January 21st, last, we find the following:

"You are all familiar with the movement for the standardization of grain made by the federal government. I have had some communication with the Department of Agriculture on this subject, and they tell me it is only being held in abeyance by lack of funds."

INSPECTION OF GRAIN BEFORE UNLOADING.

There has been a bill reported, the McCumber bill, which has some provisions requiring certification and inspection of grain before unloading. That is a matter in which you are all vitally interested. For quite a long time the Interstate Commerce Commission has been receiving numerous complaints in regard to the shrinkage in cars of grain and hay, and has been holding a series of investigations. There was one in session January 21 in



PRESIDENT W. C. BROWN

particularly care to be welcomed to Kansas City. There was a time when we, as traveling men, would jump off the train during a short stop at the grain man's station, hand him our card and just as he was about to say the Kansas City Board of Trade was a den of robbers, the engine would cry "toot, toot," and the Board of Trade traveling man would jump the train to continue the experience at the next station.

In those days also the country grain dealer would sometimes plug his ears and for these and other reasons we didn't love each other very much, yet, due to personal contact and acquaintanceship we now work together. The Kansas City Board of Trade today pays attention to your suggestions. When you formed the idea, last year, that we establish an inspection department at Kansas City, we did so. Whether it has been a success remains for you to say.

One thing that is especially interesting to me is the work of Secretary Ball of the Crop Improvement Committee, who is here and who will address you tonight. Since J. C. Murry of Chicago first talked to grain dealers on seed oats, at a meeting of grain men at Omaha, Nebr., some years ago there has been a wonderful interest in seed selection and crop improvement. Our crop of oats alone increased from approximately nine million bushels in 1909 to 1,400,000,000 the last crop year. The same increase has been made in corn. An enormous amount of literature was sent through Kansas and the southwest last year on crop improvement subjects, and it only cost the committee in Kansas City about \$150. There is not a man in this room who cannot go home and help materially to increase the yield of grain in Kansas next year if he will. I want to make it a part of my welcome to ask that you try to help us increase our crop of grain. I hope to see you at our banquet tonight and that you will have so successful a meeting and such a pleasant time in our city that you will wish to come again.

President Brown responded to Mr. Aylesworth's welcome and said he was sure that all present con-

Pittsburgh. Among the witnesses was Mr. Limbarger, the chief of the inspection bureau of the Trunk Line Association. Mr. Limbarger was questioned about these shortages that had been reported, was asked how serious they were. I quote from the Pittsburgh Post: "The witness stated that a shipment of barley, containing 1,200 bushels, to the seaboard was found to be short 518 bushels. 'To what do you attribute this shortage?' was asked by the Interstate Commerce Commission. 'We have failed to discover,' was the reply. 'Do you think there is a shrinkage to the grain in any manner?' 'No, I don't. My candid opinion, if you want it, is that the grain elevators are stealing the grain.' It is just such statements as that, of men in Mr. Limbarger's position, which causes the Interstate Commerce Commission to institute an inquiry in regard to the weighing of grain. I saw Mr. Limbarger and asked him: 'Did you make that statement?' He said, 'Absolutely.' I said, 'Did you mean it?' He said, 'I came down here to make it.' He said, 'There is somebody crooked in the business and we are going to get them.' That is rather on the side."

Much as some of our friends (?) dislike it we are drifting, not only towards Federal Inspection of the grain and its products, but also towards Federal supervision of weights. Man's greed has ever been his stumbling block and the old saying "If you give the devil enough rope he will hang himself" is fully exemplified in the history of all wrongful acts.

It is not possible for the fellow in the country to be always wrong and the miller or terminal elevator always right. To know you are right and then go ahead is the thing for us to do—put our scales in good condition, operate them honestly and then see that the habitual short-weight fellow at the other end is looked after in a careful and painstaking manner. I would like to see some recommendation regarding the handling of this matter submitted to this convention.

Not the voice of the Turtle, but the voice of the scoop shoveler has been heard in the land this season—more, it seems to me than usual. I have great regard for the firms refusing to handle this kind of business and a wholesome disregard for the welfare of the firms who handle this sort of dope and then expect regular dealers to favor them with their business.

The various grain journals are good dispensers of news and a line or two addressed to them giving number of car, by whom and to whom shipped, would be a source of information to other dealers.

And now in conclusion, I would suggest that you give this meeting your undivided attention—it will pay you—many points pertinent to your business will be discussed and it will be greatly to your individual advantage to be here and not only listen to what is said, but do some of the saying yourself.

Secretary E. J. Smiley of Topeka, read his annual report. The report follows:

In submitting my 10th annual report, I must necessarily review the work done during the year, most of which has been submitted by monthly bulletin to all members of the association. Nature has been kind to the Southwest, which includes Kansas and southern Nebraska, during the harvest of 1912 and this territory has produced a bountiful crop of wheat, which was nearly all of good quality at the time of harvest. But owing to unfavorable weather conditions during the latter part of the harvest, a large per cent of the headed wheat in certain sections of the territory, and the carriers' neglect or inability to furnish box car equipment to move the grain as rapidly as offered, caused considerable loss both to farmer and grain handler. The question naturally arises in this connection, who was directly at fault for the greater part of this loss, and could it have been avoided. We believe that the carriers could have prevented part of this loss by anticipating several months in advance, the demand for equipment and put into condition much of their rolling stock that they permitted to remain on sidetrack until the harvest was assured before ordering to repair tracks.

Another feature to be considered is the indifference of the general merchant to the general welfare of the public. When I say general merchant, I refer to the merchant in the smaller towns and the receiver at terminal markets buying and selling commodities in car lots. In practically every town I visited during the free movement of wheat from the farms, when box cars were scarce and commanding a premium, I found from one to six standing on side track, loaded with lumber, lime, building material, etc., and the local merchant was making little or no effort to have these cars unloaded within the free time or forty-eight hours, offering as his excuse, that labor was scarce and he would rather pay the one dollar per day demurrage after free time had expired, than to be put to the trouble and expense of securing extra help. I also found cars of 80,000 and 100,000 pounds capacity set to track loaders at points where three to five elevators of 15,000 to 20,000 bushel capacity were located and these elevators filled to the roof, and two to four days was required by these track loaders to load these cars to their full capacity. The question arises whether it would not be for the best interest for all concerned for the state legislature of the southwestern states to legalize a reciprocal demurrage charge of at least \$3.00 per day for the detention in loading and unloading of all car equipment.

That there is no surplus of box cars in the United States today and that the roads are not making any special effort to increase this class of equipment makes this a very serious problem for the grain trade. In June, 1909, the legislature of the State of California enacted a state statute containing a reciprocal feature fixing the demurrage rate on state shipments at \$6.00 per day. This rate was continued in force until May, 1911, at which time it was super-

ceded by a rate of \$3.00 per day under an order by the California Railroad Commission, and which has later been approved by the I. C. C. on interstate shipments. We can cite to you numerous instances in our state where consignees have held equipment an unreasonable length of time because it was cheaper to pay the one dollar per day than to unload. From the experience the shippers of the southwest have had the past season, we consider this a grave problem and one that should receive attention before this convention.

A FAR-REACHING DECISION.

Our Association has won a signal victory during the past year, when the Supreme Court of Kansas held the Kansas law governing inspection and weighing of grain into and out of elevators in Wyandotte County null and void. This decision was far-reaching in its effect, and as a result the Kansas Inspection Department as far as Wyandotte County is concerned, was put out of business, and the Chief Grain Inspector discharged, all of his employees, but his chief clerk and one deputy. As this decision was handed down in June, 1912, and the Chief Inspector discharged his force shortly afterwards, there was no inspection department in existence July 1st, 1912, to handle the vast volume of grain to be shipped from Oklahoma, Colorado, Nebraska, Kansas, Missouri, Iowa and Texas. This was the condition confronting the officers of your organization, July 1st.

They realized the necessity of an inspection department and petitioned the officers of the Kansas City Board of Trade to create a sampling and inspection department and employ competent men to take charge. Our prayer was granted and in July



VICE-PRESIDENT A. H. BENNETT

an inspection department was created and placed in charge of one A. R. Ware, who will address you tomorrow on the subject of Office Inspection vs. Track Inspection, and will doubtless show to you in his address that office inspection under Board of Trade control has proven more satisfactory to buyer and seller and is more economical than track inspection under political control, but unfortunately, the powers that be in politics are not satisfied with present conditions and insist on taking entire control of the inspection and weighing of all grain at all points within the state where, in the judgment of the Chief Grain Inspector, one or more deputy inspectors and weighmasters might be maintained.

We believe that practically every Kansas shipper is familiar with existing conditions and we consider this an opportune time to consider what action should be taken. The Kansas legislature is now in session and we believe that the members of the present House and Senate constituting the Kansas legislature will gladly welcome suggestions from their constituents and their actions will be governed accordingly. A bill has lately been introduced in both branches of the Kansas legislature and has the approval of the members of this organization.

This bill is known as House Bill No. 473 and provides for state inspection and weighing of all grain at all points within the state where deputy inspectors are maintained, unless the owner of the grain or his agent shall cause to appear on the bill of lading the notation, "Official Inspection and Weighing not Desired."

This bill was referred to the Agricultural Committee of the lower House and met with their entire approval and was introduced by them as a committee bill. The bill will come up for final consideration in the House the latter part of this week, or the fore part of the coming week, and we would strongly urge every Kansas dealer present at this convention, before returning home to visit Topeka and talk with his representative with reference to this bill. As usual, there are a number of freak bills introduced at this session of the legislature, one of them being a track scale bill, providing for installation and maintenance of track scales, the cost of installation to be borne equally by the carrier and the ship-

per at all points within the state from which there has been shipped during the year 1912 100 cars or more of grain, seeds or hay. However, no provision is made in this bill for the local dealer's ownership in the scales after they are installed. The fact that the bill was introduced in the Senate by the attorney for the Mo. P. Railway Company leads many to believe that the bill contains a joker.

DELAYED REINSPECTION.

This subject is one with which the shippers to the Kansas City market are all familiar. The delay in cars reaching elevators and mills after first inspected and sold by sample on the exchange floor has caused more loss to shippers to this market than all other causes combined. It is our understanding that the exchange in this city has a rule reading, "Whenever grain in bulk is sold for cash by sample subject to the inspection of the purchaser the purchaser must accept or reject same by or before eleven o'clock a. m. of the business day next succeeding the day of sale. In case the purchaser does not notify the seller by eleven a. m. of the next business day, to the contrary, it shall be understood that the property be accepted." It is our further understanding that this rule was adopted by a majority vote of the members of this exchange several years ago, but that the rule applies only to purchases going out of the city and that all purchases of grain on the floor of the exchange are made subject to reinspection on their arrival at the elevator or mill to whom sold and where reinspection is called, the seller acting as agent for the shipper does not insist that the inspection department under which the first inspection was made, shall reinspect.

Why was this rule adopted if no effort is made on the part of this exchange to enforce it? Why inspect grain on its arrival if it is all sold on the exchange floor subject to reinspection on its arrival at the mill or elevator? What chance has the shipper to protect his interest when the receiver acting as his agent advises him upon the arrival of his car the grade and price at which same is sold, and when the car arrives at the elevator the elevator foreman calls for reinspection if only ten bushels of the contents of a hundred thousand pound capacity car is found out of condition? So far, we have never been able to do anything to prevent this hold up, but we believe that where grain is sold by sample on the floor of the exchange, the purchaser should be compelled to accept or reject purchase within 24 hours after the sale is made.

KANSAS CITY DAILY GRAIN QUOTATIONS.

It is doubtless apparent to all shippers, and we believe members of the Kansas City Board of Trade, that there has been a wide range in the quotations on No. 2 wheat appearing in the Kansas City Price Current. This has been the case for a number of years with the top being quoted nominally, so and so, which is two, three and sometimes five cents higher than the bulk of sales with only an occasional car selling at the top price, which is possibly a fictitious price, in order to pass out the impression that Kansas City is a better grain market than Wichita. We believe that quite a number of Kansas and Nebraska grain dealers object to these quotations being sent out, as it works a hardship on the country grain dealer. The farmer notes in the daily paper, wheat quoted so and so, with the range of perhaps 65c per bushel on the top and bottom of the number twos, while in fact there is only a range of two to three cents per bushel. The country dealer in buying his wheat, must base his price upon what it will bring, and not upon the nominal price quoted. Now what is the natural result? The farmer thinks he is being robbed by the local dealer, as he is very sure that the wheat he produces is of the best quality and will command the highest price in the market. As the interest of the country shipper and the receiver at the market is very closely related, we feel that in justice to the country grain dealer, the receiver should be willing to cut out these hot air quotations and have the actual sales quoted. If this idea meets with your approval, we would suggest the appointment of a committee by the chair to confer with a committee appointed by the president of the Board of Trade, this committee to report the result of the conference before the close of the convention.

REVISION OF TRADE RULES.

Believing that some changes should be made in our present trade rules, I would recommend the appointment of a committee of three to go over these rules and offer such changes as in their judgment are necessary. In this connection, I would suggest the following change in rule No. 5, "Time of Shipment or Delivery." The rule now reads, "The seller shall have such given number of days (excluding day of sale, Sundays and legal holidays) in which to load, etc." We would suggest that this rule be changed to read, "The seller shall have such given number of days excluding day of sale in which to load grain to apply on contract." Our reasons for making this suggestion is that, the rules of the National Grain Dealers' Association and the different grain exchanges no longer include Sundays and legal holidays in their free time.

LOCAL MEETINGS.

The usual number of local meetings have been held throughout our jurisdiction during the past year, and with two exceptions, these meetings have been well attended. There is no doubt but what these meetings are of great benefit to all dealers in a locality where they are held. Dealers coming in touch with one another at these local meetings are enabled to iron out the real differences existing and it tends to prevent the spread of "imaginitis"; a disease prevalent in certain sections of the country, among grain dealers during a free movement of grain.

In conclusion, I wish to impress upon the mind

of each member of this association that he has a duty to perform in keeping our organization up to its high standing, and it is with a good deal of pride that I make the statement that only one member of our entire organization has refused to live up to our rules during the past year. It should be a very great source of satisfaction to every member of this organization to know that practically all of the grain exchanges of this country are confining their bids and solicitation of business to the names of individuals and firms found in the directory of this organization. I wish to thank the officers and each member of this association for your hearty co-operation during the past year and wish to assure you that with the same hearty support this new year, and years to come, the Kansas Grain Dealers' Association will be known to the grain trade throughout the country as an organization whose sole purpose is to protect the honest grain dealer in his pursuit for wealth, health and happiness.

The following address on the subject, "The Relation of the Carrier to the Grain Dealer," was made by E. Bossemeyer, Jr., of Superior, Neb.

This subject has been so often discussed at grain dealers' meetings, and so many able addresses have been delivered on it, that I can not hope to add much of value to what has already been said. I will, therefore, confine this paper to my own recollections of the changing relations of the carrier to the grain trade during the last twenty years, and to the conclusions that I have drawn from my observations.

The interests of the grain dealer and the carrier are so closely related that their interdependence is readily seen by the most casual observer. The producer of grain desires that his products be offered in the greatest possible number of places, and to the greatest number of people, and the consumer desires that he may have access to the largest number of producers and places of production; the one, to secure the largest possible pay for his services to the world as a producer; the other to secure at the lowest possible price the grain or products of grain necessary for his existence. The expressed desire becomes a demand and the railways of the world and their hard working co-laborers, the grain dealers, have responded to the call and are performing a truly great service, and I do not believe their rewards ever have been, nor are they now, out of proportion to the service performed. Here as elsewhere, the law of compensation is evident. Just in proportion as the carrier and the grain dealer render to the world good, honest, efficient service, with enthusiasm not entirely inspired by the hope of reward, but from a love of the work to which they are giving their lives, just in that proportion will the world reward them for their services.

Secretary Wilson of the Department of Agriculture has called attention to the fact that the producer receives for his products less than 50 per cent of the price paid by the ultimate consumer. On first thought this seems unfair, but when we stop to consider the many things necessary to be added to the first cost of production before the products are finally sold to the consumer, this including transportation often times across a continent or half way round the world, the wonder to me is that the percentage paid to the producer is as high as it is. For instance, which can you do the most easily, produce a thousand bushels of corn on a farm in Kansas, or transport it from the farm to New York or San Francisco?

CONDITIONS TWENTY YEARS AGO.

Twenty years ago when I first began shipping grain, each carrier had a favored grain dealer operating a line of elevators on its line of road. These grain companies were termed line houses and the relations existing between the carrier and its line house was a matter of much speculation and interest to the smaller shippers.

In those days a small shipper could not hope to sell grain successfully in any of the large centers of consumption. The line house could always undersell him by reason of the peculiar and intimate relations existing between it and the carrier. The small dealer could do little else but buy grain from the producer as cheaply as possible under the competitive conditions surrounding him and consign it to the nearest market to be sold for what it was worth. He could occasionally sell his grain direct to the consumer, but this was generally when the favored line house was busy with larger deals. It was the practice of the line house to accumulate a large amount of grain at some advantageous point and get ready for a big cut in rates from that point to some distant market center—the distance generally measured by the length of the line of that particular carrier who was making the cut.

In short, the relation of the carrier to the small dealer was anything but satisfactory, and to the line house, if it was not satisfactory, it must have been because the traffic managers or other officers of the carrier could not agree with the managers of their respective line houses as to the proper division of the spoils.

Competition forced the grain dealer to secure transportation of his grain at the lowest possible price through any means available—misstatements of weights, of grades, or of the description of the product offered for shipment, rebates, if he could get them—any device that could be invented to secure a lower rate. All this not because the majority of them liked these methods, but because if any one of their competitors resorted to such practices, the rest were forced to do so or go out of business, and this condition existed between competing carriers as well as between grain dealers. It existed long after the passage of the act to regulate commerce, but as this law was strengthened by other laws, notably the Sherman Anti-Trust Act; the Elkins Act and the Hepburn Bill, and by court decisions

which showed plainly to both carrier and dealer that the laws were the spoken will of the people and could be enforced, both the carrier and the dealer, a few of them unwillingly, but many of them gladly, adjusted themselves and their business to the new order, and a truly wonderful change has been made in the past fifteen years, though perhaps more noticeable in the past ten.

I believe that to the adjustment of the transportation affairs of this country to a sound, honest basis, can be traced much of the commercial prosperity and unprecedented advancement in all lines of business during the last decade.

It is interesting here to note that there are few, if any, of the old line houses west of the Missouri River who are operating in the grain business today. The inference is that they had so long existed, not by reason of their merit or of good service rendered to the public, but by the favor of the carrier, that when they were thrown on their own resources and obliged to sink or swim, they were unable to compete.

THE SMALL DEALER'S OPPORTUNITY.

The multitude of small dealers were quick to rise to their opportunities, when they could compete on even terms with every other dealer be he large or small. This has been a splendid era for the small dealer. When he found that he need no longer fight for recognition and favor of the carrier, he immediately turned his energies into legitimate channels, and he has found the earning of an honest dollar much easier than a dishonest one.

I cannot speak for the large captains of industry, but for the smaller business men, whom, like the poor, "The Lord must love for he made so many of



SECRETARY E. J. SMILEY

them," I am glad to say that today as never before, they recognize that honesty is not only the best policy, but is the foundation of every successful business; that the square deal is not for pre-election purposes only, but, when applied, really pays dividends and adds immeasurably to the pleasure of doing business, in fact, enables him to speak with honest pride of his business.

There is another phase of the relation of the carrier to the grain trade, and it applies as well to all trades, that can properly be considered here. It is a problem demanding solution and will not be settled until it is finally settled by the application of the rule of the square deal applied to both sides of the question. I refer to the conflict between the carrier and the public over the establishment of just freight rates. It is a big question and I wish to suggest that only when we place ourselves on both sides of it, can we get a fair view of it. There is much talk of "A fair return on capital invested," "Cost of service," and of commissioner's control of rates based on actual physical valuation of the property. This all sounds well, but I am inclined to think that few of us would engage in the grain business and invest our capital in the building of elevators, if there was a commission who would make a physical valuation of our property and regulate our margin for the handling of grain so that we could not earn more than 6 per cent or 8 per cent on our investment, and would not at the same time guarantee that we would earn any per cent, or would not meet with a loss.

RESTRAINT AND REGULATION NEEDED.

The business of a carrier cannot be properly compared with that of any other line of business, yet in many ways it is like other business and the measure of their prosperity is so closely the measure of the prosperity of all, that in asking them to squeeze the water out of their business we should be careful lest we overdo it and great damage be done to the whole business fabric of the country. Watering stock, or the purchase of large quantities of material from other corporations whose prices on their products are based on watered stock, is absolutely wrong, but the fact that we have permitted our captains of industry to do this in the past, will not justify the destruction of their business now. What

we should do is to resolve to correct the wrong conditions. We are in a measure to blame and what is needed is not punishment of the grafter but restraint and regulation by adequate laws strictly enforced.

The price of steel rails and the material entering into the construction of the rolling stock of our railways has much to do with the charge they must make for their services. If we permit the steel manufacturers to merge their business so that competition is eliminated and to water their stock to the limits of their greed or imagination, and charge the carrier for their products, which he must have, a price sufficient to pay dividends on their grossly inflated capital, we must pay the penalty in high freight rates, and be satisfied with an occasional gift of a library or a college endowment.

This opens a question in economics much too large for discussion in this paper, but the people of this country are thinking of these things and the only regret is that the public conscience has been so long in becoming aroused that much harm has already been done.

Let us not forget that the name carrier is applied to an organization of just such men as you and I. Men who are giving their lives to the service which means so much to us all and that the majority of the stockholders who draw the dividends are actuated by the same impulses that actuate you and I, and will be as quick to withdraw their support from the railroads of this country when they find that the public is disposed to pay smaller dividends as you and I would be.

In a discussion arising over Secretary Smiley's recommendation concerning variations in quotations as given out by the Kansas City Board of Trade, James Robinson suggested that prices be quoted based on the test—that is, a 56 pound No. 3 wheat should be given with its price and 59 pound No. 2 with its price so that the farmer would see the reason for the higher price. President Brown said he did not use the tester in his market but bought all grain on its merits. All the troubles, he said, arose through ignorance and the grain dealer should explain to the farmer why a certain wheat would grade No. 4 even if it was 70-pound wheat.

William Shrankler of Gorham, said that the farmer who read the price quotations in the daily papers could only see the higher, never the lower price. He thought that the Kansas City Board of Trade desired to be fair in the matter but that they should be careful not to give out fictitious prices as it resulted in great injury to the grain man.

George C. Aylesworth, speaking for the Kansas City Board of Trade, explained that this discrepancy in price quotations did not occur in oats or corn but only in wheat. This was due to the fact that some wheats were worth more in the Kansas City market by six cents, than other wheats. We have only one grade, he said, to designate hard wheat. It might be Turkey wheat or some other variety. It goes into the quotations as No. 2 but it is sold at a premium. The range for the day might be from 80 to 90 cents, and the committee on the board sends out the entire range but we do not wish to put out fictitious quotations. It was decided, on motion, to appoint a committee to meet with the Committee of the Board of Trade and look into the matter with the view of giving out quotations that would not be misleading.

President Brown appointed the following committees:

Resolutions—H. Work, chairman; James Robinson, J. H. Dugan, E. Bossemeyer, Jr., A. H. Bennett.

Committee on Revision—C. F. McCullough, chairman; C. B. Tripp, W. E. Clark.

Committee to meet with Board of Trade—Wm. Shrenkler, chairman; Mr. Heukman, F. W. Gauntt.

W. C. Goffe invited the dealers to attend the banquet in the evening as guests of the Kansas City Board of Trade, after which the session adjourned.

BANQUET AND ENTERTAINMENT

The association was the guest on Tuesday night of the Kansas City Board of Trade. The cordial relations existing between the members of the Board and the Kansas dealers could not be better verified than by attending one of the annual entertainments which it has been the custom of the Board to provide. This year, in addition to an excellent dinner, there was given a first-class vaudeville show; and that, too, in which the entertainers were for the most part from the membership of the Board itself. After coffee was served, W. C. Goffe, chairman of the Entertainment Committee,

took charge of the proceedings, and there were short addresses by President W. C. Brown, George Aylesworth, and Senator Stone of Kansas. Then Bert Ball, secretary of the Crop Improvement Committee, Council of Grain Exchanges, gave one of his stereopticon illustrated talks, showing what was being done in various counties and on railroad trains to educate the farmer in raising larger and better crops.

Next the Dinkerville quartette entertained in selections. This quartette was composed of Harold Spencer, Paul Boltz, Geo. Dean, David Grosch, and was repeatedly encored whenever it sang during the evening. A character sketch, "A Bulkhead Consignment," by the two Murphys, Willie and Pete, pleased everyone, and then Tom and Bob Smith, representing "The Gold Dust Twins," entertained by some unusually graceful buck and wing and character dancing.

A monologue was given by Paul Uhlman, who was recalled, and then the *chef d'oeuvre* or the evening was rendered. It was a real "go" between James Knight (Jas. Christopher), the Omaha Hope, and Kid Burns (William Burns), billed as the California Bungstarter. Charley Dayton acted as referee. Chairman Goffe advised the ladies before the bout that if they were unable to witness a little blood, they should have their handkerchiefs ready with which to cover their faces at critical moments. As the "Omaha Hope" entered the ring at 90 pounds and the "California Bungstarter" stripped at 240, the great cleverness of the former was apparent when his opponent took the count after three rounds of desperate fighting. There was much applause, much fun, but no blood letting, greatly to the disappointment of the ladies.

The Entertainment Committee which must be credited with providing an evening of real enjoyment was composed of W. C. Goffe, chairman; William Murphy, O. L. Croysdale, Frank P. Logan, James N. Russell.

WEDNESDAY MORNING SESSION

The Wednesday morning session was called to order by President Brown at 10:30. He at once introduced J. C. F. Merrill, secretary of the Chicago Board of Trade, who addressed the convention on the subject, "Pending Federal Legislation Regarding Grain." Mr. Merrill took up separately the Cary Bill, Page Bill, Pomerene Bill, proposed Federal Inspection and sundry bills relating to buying and selling for future delivery. Each one of these separate phases of legislation was discussed at length and members were able to obtain an adequate idea of their provisions. Mr. Merrill was roundly applauded as he finished his address.

Following Mr. Merrill's address, Secretary Smiley brought up the subject of Federal inspection, explaining how, at Missouri river points, Kansas dealers were obliged to accept two political inspections. He inquired if the dealers would prefer Federal inspection of their grain.

Mr. Gaunt said he was now taxed for two inspections and he did not know which one was worse.

Mr. Young: My personal views on Federal inspection are that it is desirable if it can be kept out of politics and one inspection govern.

E. D. Bigelow, secretary Kansas City Board of Trade: Is it not true that much of the objection to speculative trading arises from the fact that bankers holding trust funds and women who are unaccustomed to business have been unfortunate in their speculations? Would it be practical for the exchanges to adopt rules prohibiting acceptance of trades from this class?

Mr. Merrill stated that when he was president of the Chicago Board of Trade he had advocated the passage of a rule forbidding the acceptance of trades from anyone in a position of trust.

Speaking on the Chicago Grain Inspection Department Mr. Merrill said for the past six years they had felt no annoyances through politics. All questions could be appealed to the State Railway and Warehouse Commission and the commission had always tried to be fair.

Secretary Smiley replied that grain originating in Kansas had to be inspected in Missouri, where the Kansas dealer had no voice in making the laws.

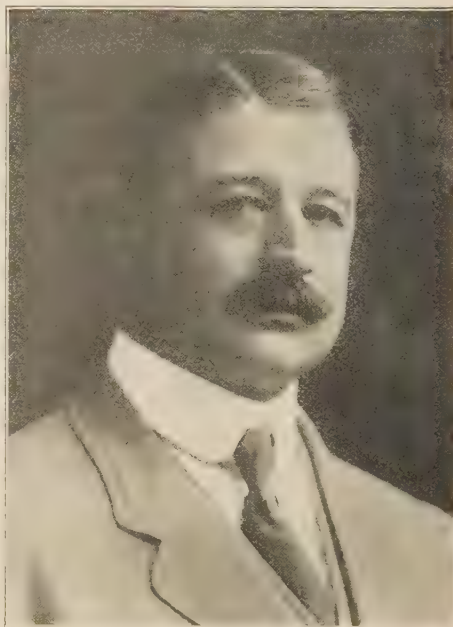
Mr. Merrill outlined a form of law which he thought would be helpful. He said, in brief, that an appeal committee should be appointed by the Department of Agriculture to act where markets were situated close to state lines. When the grain crossed the line the owner of it should have the right to appeal to this Federal Committee, if he was not satisfied with the inspection. It would have a tendency to make uniform the two inspections, so that the appeal committee would be rarely called.

The session then adjourned until 2 p. m.

WEDNESDAY AFTERNOON SESSION

The Wednesday afternoon session opened with an address by James Robinson of Potter on the subject, "The Duties of a Country Grain Dealer to Himself, to His Competitor, His Commission Man, to the Trade and What He Should Expect and Demand from the Common Carrier and Farmer." This was followed by a prolonged discussion.

An address on the subject, "Presentation and Payment of Claims," was made by H. C. Pribble,



W. C. GOFFE
Chairman of Entertainment Committee.

freight claim agent of the Santa Fe Railroad, Topeka. Mr. Pribble stated that there must necessarily be some loss in grain all along the line from the producer to the final consumer. Losses on wheat in transit were greater than of all other grains. He gave as causes for excessive variation in weight from the country point to the terminal market, indifferent, careless and unsystematic weighing at country points; small scales necessitating many drafts to the carload; improperly set automatic scales and failure to test them at intervals; leaking car spouts; inadequate policing of cars while loading. The greatest cause, however, said Mr. Pribble, was failure to properly cooperate before loading and line them where needed. He asked the co-operation of the dealers in an attempt to lessen losses in transit by loading only properly equipped cars.

The question was very generally discussed of natural shrinkage. Secretary Smiley said it was a fact that in certain seasons corn from the gulf points would gain weight while in others a loss in weight would be shown.

S. W. Strong, secretary of the Illinois Grain Dealers' Association, told the Kansas dealers of a conference which had been held in Chicago about two years ago in which a general investigation was made of the question of natural shrinkage. At that time 500 cars had been loaded out of elevators, unloaded back in 24 hours over the same scales and the shrinkage was found to be 69 pounds per car.

M. H. Starr, scale inspector, Kansas City, Kan., spoke as follows on "The Relation of the Scale to the Trade":

In choosing a subject of this kind it is realized that there are many sides from which it may be viewed according to the position of the observer. There are two well defined positions, however, which you gentlemen occupy in viewing the relation of the scale to the grain trade, namely, as that of buyers and sellers. There is a point which more or less influences your view on the subject and that is, the ownership of the scale in question.

There is another side from which this may be viewed and that is the side viewed by this department.

Of what value are the opinions of this department on the subject chosen?

The duties of our scale inspection department leads right to the heart of one of the questions before the trade which is the discrepancy between origin and destination weights. We examine origin and destination scales, are generally in position to estimate their past history within reasonable limits and have demonstrated in some few instances during the past season that the percentage of total difference between origin and destination weights that can be laid directly to inaccurate weighing machinery is surprisingly large. It has occurred to us time and again and our records bear us out in this, that if your scales were invariably correct and could be proven so then the solution of shortages would be at hand. You also realize this to a certain extent and have recognized the importance of the accuracy of your weighing machinery by creating this scale inspection department.

In a case of difference in weights it does not follow that either shipper or receiver is dishonest, directly, but on the other hand how many precautions have these gentlemen taken to be accurate in ascertaining the amount of grain in question before affidavits are made? Generally the first thing done is to point at the carrier and say, "You're it." The carrier says, "Our seal record is clear and there is no leak report, gentlemen it is up to you." By the method of elimination we can, given sufficient data, trace an error in weights providing this data contains enough known quantities. There is no solution of a problem where all the quantities are unknown and at this point do the scales form one of the known quantities that will enable us to locate the discrepancy? Generally no.

When shipper makes affidavit to his weights he takes oath that his scales are correct. His proof of this fact might be that destination weights at some points agree with his or it might be that has scales have been tested and inspected and kept in correct weighing order by those qualified to do that work. There will be no correct solution for this shortage as long as there is a scale whose condition is unknown.

When a man takes his oath that a thing is so we construe it to mean that he is absolutely certain of his stand, that by all he holds sacred, he is right, but at different times when it was convenient scales have been looked over casually at elevators where owners did not care for or have interest in scale inspection, that if our experience counts, would have been doing remarkably well to have weighed within ten per cent; but affidavits are being made to weights taken over these scales when it is impossible that scale owners could have been certain of the accuracy of them. That owner takes not even the first step to make his scale one of the known quantities of his business.

There were 278 of this body who during the last half year took this necessary first step of scale inspection. How many will take the subsequent necessary steps remains to be seen. Your hopper scale is no better than your elevator where foundation for scale is part of the building; your wagon scale is no better than the worst conditions to which it will be exposed, that is to say no more consistently reliable; your automatic is no better than your understanding of it or your application of that understanding.

The \$40.00 saddle and the \$10.00 horse was not so unfavorable a combination as the \$200.00 scale and the 30 cent foundation, and the subsequent steps which should be taken to put your scales in condition to give correct weights are covered in this general suggestion—install your scales properly, according to specifications which will be applied by this department, then give them the advantage of regular expert attention.

When an owner opens his office for business and begins to buy and sell over his scales he proclaims by his actions that they are correct. When customers sell to him or buy from him and take his weights as the basis of settlement they signify their belief in his honesty and there is food for thought in this fact, that generally when there is a question of weights the farmer says "the scales are wrong." Now the very machine that controls to a great extent the relation of the grain man to his trade is a machine which requires more than any other around the elevator regular, careful, expert attention; but if there is as a rule any piece of machinery that receives less attention of any kind than the scale we have failed to find it.

When the engine stops that fact is apparent; when the elevator clogs that is also evident, but when the scale goes wrong it must be mighty wrong before the error is noticed. When such a situation arises what is the usual means of demonstrating to the farmer that the scale is right? By comparative tests with other scales in the locality. This may be satisfactory in that case but is far from correct. If the grain man would use these comparative tests to satisfy his trade we would call that policy, but when this method of testing is held up to be equally ac-

curate with tests as made by experts with standard test weights and used as a substitute for those tests, "then that is something else again." There are errors in scales which fluctuate from light to heavy and back again which are small in amount and average zero; these are in the minority. Generally when a scale is commercially inaccurate it is running off consistently one way or the other. The farmer is satisfied if on comparative tests his load checks within 15 pounds, but one of these scales which apparently agrees with the others may contain an error which is consistently getting into buyers or sellers pocket on each load that can only be located by test weights in the hands of a competent scale man, and it is also those errors that never stand still but can be prevented by regular inspection.

There is an opinion prevalent that the relation of the scale to the trade varies in proportion to the size of the crop, that with a small crop there is less need to be certain of the scale. But what kind of reasoning is this? Can you better afford to lose, say \$100.00 over your scales, in the year your total profits are \$800.00 or in the year your profits are \$3,000.00? Can you afford to take greater chances in your business the year of small profits than in the year of large crops and chance for greater profits? Should you be more accurate in your business and watch the small things during hard times or during prosperous times? Or do you, who refuse inspection owing to the light crop, request inspection in other years simply to defer to opinion? Or do you say you cannot afford it? It is a heavy expense. Twenty-five cents per month per scale for weight insurance.



EDWARD M. KELLY, DIRECTOR

How much does your fire insurance cost? Does your fire insurance bring in a less amount than that passing over your scale? If you lose your horse through fire you stand good chance of having the loss made good, but when you lose over your scale who pays that? This is simply considering the dollars and cents standpoint and from your side of the fence, but put yourself in your customers' place and use exactly the same argument and what is the answer?

In conclusion, it is our opinion that the scale alone cannot be taken in relation to the trade, but the combination of the scale and owner is inseparable, that an accurate scale with an accurate man is the only combination for lasting good results, that an honest man cannot afford the class of advertising an inaccurate scale gives him and finally that a man cannot reach that height of honesty which will overcome the evil effects of an incorrect weighing machine.

A. R. Ware, chief grain inspector of Kansas City, Mo., explained the method of work of his department. "The inspection department was established July 1st. last year," said Mr. Ware, "with fees of 50 cents per car and the department up to the present time has been self-sustaining. Our method is that of office inspections and the rules governing our department are those of the Grain Dealers' National Association with the exception of a few changes due to local conditions. We desire to gain the confidence of all shippers through efficiency, and we hope to have the hearty co-operation of all shippers to this market."

Assistant Secretary John Quinn, of the Grain Dealers' National Association, gave a number of reasons in a short address why Kansas should follow her sister states and affiliate with the National body.

Secretary Smiley moved that the resolution to affiliate with the Grain Dealers' National Association be tabled until the day following when a larger

number of the grain men would be present for its consideration. The motion to table was lost and on motion by C. L. McCullough the previous question was put, resulting in a tie vote.

President Brown stated that he would have preferred leaving the subject for the day following, but that he was in favor of the resolution and therefore declared the resolution adopted, thus affiliating with the National organization. This closed the second day's sessions.

THURSDAY AFTERNOON SESSION.

After the convention had assembled on Thursday afternoon the report of the Committee on Rules was read by W. F. McCullough. This report recommended that Rule 5, covering time of shipment or delivery, be amended by striking out Sundays and legal holidays, making it read, "Any given number of days shall mean that the seller shall have such given number of days (excluding date of sale) in which to load grain to apply, etc."

E. Bossemeyer, Jr., read the report of the Resolutions Committee. Thanks were extended the Kansas City Board of Trade, also the speakers on the program. Gov. Hodge was requested to appoint no chief grain inspector who had not had at least five years' experience in handling and grading grain; and that such chief inspector appoint no assistant or deputy inspector who had not had three years' actual experience in same line. Another resolution adopted was that Trade Rule No. 7 end with the words "Upon failure to receive, etc."

J. H. Dougan of Topeka then addressed the convention upon the subject, "Shall We Demand of Carriers That They Furnish Us Cooped Cars for Loading Bulk Grain?" Considerable discussion followed, but no action was taken.

A motion requesting the Kansas City Board of Trade to report only actual sales of grain in market quotations was carried.

A motion to affiliate with the Grain Dealers' National Association was carried by a vote of twenty to four.

S. W. Strong, secretary of the Illinois Grain Dealers' Association, made an interesting address upon "The Value of Uniform Rules and Methods," after which the election of officers was held, resulting as follows:

President, W. C. Brown, Beloit; Vice-President, A. H. Bennett, Topeka; Secretary-Treasurer, E. J. Smiley, Topeka; Board of Directors, F. W. Gaunt, Alton; George Craven, Summerfield; J. W. O'Connor, Hartford; Edward Kelly, Wichita; E. W. Bossemeyer, Jr., Superior, Neb.; E. C. Houckman, Fairfield, Neb.

The convention then adjourned *sine die*.

KANSAS BREEZES

Smiley for Secretary of State in the cabinet of Woodrow Wilson. Well, what do you think of that?

Wednesday being a holiday there was an unusually large number of Kansas City Board of Trade merchants in attendance at both morning and afternoon sessions.

Lapel buttons were distributed by the Smith, Mann Grain Co. with the letters "S. M." featured. Dealers could not decide whether they stood for "State of Missouri" or "Show Me."

A complete display of elevator scales was shown in room 204 by the Kansas City branch of Fairbanks, Morse & Co., of Chicago. The exhibit was in charge of L. H. Carr and A. H. Schultz.

The guests at the meeting included J. C. F. Merrill, secretary Chicago Board of Trade; S. W. Strong, secretary Illinois Grain Dealers' Association, Urbana, Ill.; Bert Ball, secretary of Crop Improvement Committee, Chicago, Ill.; John Quinn, assistant secretary Grain Dealers' National Association, Toledo, Ohio.

Cordial greetings to their friends among the Kansas grain dealers were extended by W. H. Kaiser of Weller Manufacturing Company, Chicago, A. C. Rynders of P. H. Pelkey Construction Company, Wichita, Kan.; E. Lee Heidenreich, Kansas City; W. P. Buchen with Richardson Scale Company, New York City; H. C. Drower with Avery Scale Company, No. Milwaukee, Wis.; Ben P. Ord-

way, representing Richmond Manufacturing Company, Lockport, N. Y.; G. H. Sheidenburg, with Great Western Manufacturing Company, Leavenworth, Kan.; W. J. Murphy, of Murphy Manufacturing Company, Kansas City; F. J. Morley, of Morley Bros., Haden & Plote, Wichita.

A special edition of "Knute's Buke" was published for convention readers. The title page contained the following verse:

"Von odder yar baen rolling round,

Grane man baen hare vonce more,

In annual konwenshun

For tawk der beesnas o'er."

Members of the association were guests of the Kansas City Board of Trade on Wednesday night at Convention Hall, where George Lurich met Tom Bransfield in a feature bout before the Missouri Athletic Club. There was also a number of parties of grain dealers at dinner with individual Board of Trade firms before going to the hall.

L. Cortelyou of Muscotah, Kan., several times president of the Kansas Grain Dealers' Association, who quit the grain for the banking business, said that the Farmers' State Bank of Muscotah, of



E. BOSSEMEYER, JR., DIRECTOR

which he is president, was now on a 20 per cent profit-paying basis and organized only two and one-half years ago. He asked what dealer had made as good a record in the grain business.

THE ATTENDANCE KANSAS.

W. S. Prather, Garfield; F. K. Barrett, Winfield; Chas. G. Woodworth, Sanford; Geo. L. Kreeck, Lawrence; Geo. R. McCarmack, Belpre; J. W. Gifford, Jamestown; A. L. Pennock, Ruwit; C. W. Bradshaw, Scottsville; A. Lyons, Langdon; W. C. Evans and wife, Schroger; M. H. Taylor, Hewins; J. B. Jennings, Jennings; Frank Volapka, Jennings; C. M. Isom and wife, Leho; W. H. Barrett, Phillipsburg; C. W. Smiley, Topeka; E. M. Stull, Palco; H. G. Ehrlich, Marion; J. E. Rogers, Glasco; J. W. Berry, Scandia; R. W. Smith, Hollywood; John Holmes, Hutchinson; Chas. E. Stuart, Ford; S. J. Owens, Hastings; C. F. Randall, Hutchinson; Stephen Swigle, Hastings; R. W. Dockstader, Cawker City; J. M. Decker, Concordia; Frank Geoffray, Wichita; E. W. Jones, Wichita; C. S. Ragan, Nortonville; Harry Ragan, McLouth; John Dick, McLouth; S. C. Groth, Ellsworth; Paul D. Miller, Russell; C. W. Wright, Wichita; J. C. Power, Wichita; F. A. James, Burdick; John McClune and daughter, Denison; John Hayes, Winfield; E. C. Sterrett, Kingsley; F. K. Barrett, Winfield; J. W. Craig, Wichita; E. Hipply and mother, Hutchinson; C. E. Stuart, Ford; C. H. Augustus and wife, Stafford; A. A. Bradley, Harlan; K. F. Roach, Englewood; W. E. Snyder, Englewood; J. C. Bradley, Rossville; Geo. B. Harper, Silver Lake; A. Rynders, Wichita; C. F. Blauer, Speed; L. J. Woodhouse, Lancaster; Chas. A. Geiger, Robinson; E. J. Smiley, Topeka; S. J. Byrnes, St. Marys; W. C. Brown, Beloit; M. W. Cardwell, Topeka; M. H. Starr, Topeka; H. S. Smith, Topeka; J. M. Black, Leho; D. W. Becker, Menden; J. C. Haines, Augusta; C. D. Kenner, Panhalk; D. G. Esse and wife, Ellis; A. E. Shultz, Wichita; C. O. Hugos and wife, Norway; Geo. Craven, Summerfield; E. A. Dobbs, McLouth; J. D. Infield, Wellington; J. W. O'Connor, Hartford; Edward M. Kelly, Wichita; F. W. Gaunt, Alton; S.

J. Thompson, Holton; T. A. Derby, Sabetha; John E. Hughes, Culver; John T. Caldwell, Culver; W. S. Washer, Atchison; S. D. Marshall, Clifton; M. Chamberlain, Beverly; Fred Mosher, Rexford; W. H. Mickesell, Rydal; F. E. Ankin, Damar; Bert Harnett, Palmer; Robt. J. Lewis, Home; Perry S. White, Frizell; W. F. McCullough, Wichita; W. Wyoming, Plainville; M. S. Graham, Rurick; J. H. Douglas, Topeka; P. W. Blauer and wife, Irving; F. J. Slip-sager, Linn; W. C. Peterson and wife, Reserve; Thos. Wise and wife, Reserve; D. J. Ragstaff, Inman; Wm. Schaenkler, Gorham; John Burney, Bunker Hill; E. N. Bailey, Baileyville; H. Westerman, Kensington; W. H. Grannholz, Kensington; B. D. Vessey, Kensington; J. R. Demmitt, Grenola; J. G. Denton, South Mound; A. L. Bushong and wife, Everett; L. Contigan, Muscotah; F. C. Silver, Morganville; W. E. Clark, Sawyer; G. B. Conner, Circleville; A. J. Garrison, Rozell; A. H. Martin, Burdette; E. A. Lund, Cedar; C. L. McCully, Altan; R. E. Weaver, Simpson; E. F. Beyer, Wichita; G. E. Vining and wife, Mahaska; S. P. Wallingford, Wichita; D. W. Mowrey, Gardner; Geo. E. Liggett, Baldwin; A. P. Anderson, De Sota; J. N. McIlvain, Phillipsburg; C. E. Hill, Hastings; H. Work, Ellsworth; Jas. A. Dongan, Perry; C. W. Hoyt, Topeka; J. Jackson, Formosa; G. H. Ling, Jetman; L. W. Peck, Topeka; J. E. Mickey, Cummings; Jno. Griffith, Baileyville; A. H. Bunett, Topeka; C. B. Zupp, Centralia; J. Robinson, Shields; H. M. Lloyd, Sterling; F. Bushong and wife, Everett; R. E. Humiston and wife, Baker; B. V. Kirby and wife, Bucyrus; J. L. Hutchinson, Russell; E. R. Stripp, Russell; C. D. Jennings, Bucklin; W. H. Peters, Ashland; J. J. Comer and wife, Willis; P. J. Mullin, Wichita; W. P. Kliesen, Dodge City; S. P. Taylor, Onaga; T. J. Holdridge, Wichita; Jay Holdridge, Wichita; H. Williams, Wichita; C. B. Tripp, Centralia; Marshall Hinneunan, Brookville; C. A. Baldwin, Wichita; H. A. Brannagel, Wichita; J. B. Walker, Winifred; W. A. Woods and wife, Liberal; J. L. Jones, Wakeeny; E. R. Dunlap, Hutchinson; M. W. Bulmer, Michigan; J. B. Kirkpatrick, Oswego; W. C. Medsker and wife, Pleona; Gar Goodno, Bronson; A. W. Finley, Elk Falls; W. C. Peterson, Reserve; W. R. Smith, Effingham; H. B. Nye, Woodston; W. D. Hasburger, Atchison; G. C. Payne, Asheville; Wm. Richards, Woodston; Joseph Balmer, Michigan; V. F. Chandler, Kerwin; A. J. Plush, Penalosa; Guy T. Morris, Delphos; E. Row, Larned; Perry N. Allen, Coffeyville; Chas. Elwell, Lawrence; A. F. Heinen, Witmore; R. E. Harrington, Baker; C. C. Smith, Conway Springs; J. F. Tombs, Wellsville.

NEBRASKA.

Stephen Swigle, Hastings; F. M. Buckridge, Brock; Earl H. Ground, Prosser; A. G. Buress, Belvidere; E. Bossemeyer, Jr., Superior; A. E. Hockman, Fairfield; L. W. Sage, Julian; J. H. Schmach and wife, Pawnee City; D. C. Hauck, Fairbury; F. H. McCarthy, Union; C. C. West, Wyoming; O. Vanier, Fairbury; Geo. P. Bissell, Central City; R. E. Richie, Ellis; S. J. Owens, Hastings; C. E. Hill, Hastings.

OKLAHOMA.

J. G. Stout, Deer Creek; J. H. Krelbiel, Yukon; W. L. Perkins, Oklahoma City; J. J. Stinnett, Oklahoma City; P. V. Sutton, Vinita; C. F. Pronty, Oklahoma City; W. M. Randles, Enid; J. H. Thow, Enid; A. T. Hemingway, Afton.

OTHER STATES.

J. H. Braden, Amsterdam, Mo.; Harvey Reed, Drexel, Mo.; J. D. Mann, Martens, Mo.; G. W. Bandt, Burlington, Colo.; F. R. Warrick, St. Joe, Mo.; O. C. Stagner, Hamburg, Ia.; G. W. Roller, Seibent, Colo.; M. R. Chandler, Brockton, Ia.; J. C. Peterson, Ravinwood, Mo.

GOVERNMENT WILL FINANCE ALBERTA ELEVATORS

Plans have been agreed upon by Premier Sifton and his cabinet and the officers of the United Farmers of Alberta following a joint conference in the Parliament Building, Edmonton, whereby the provincial government will finance the construction of a system of farmers' line elevators. The plan contemplates a loan by the government of 85 per cent of the cost, the balance of the money to be raised by the growers. This loan is to be repaid in 20 annual instalments.

The details of the arrangements entered into are that the executive officers of the United Farmers' Association will form themselves into a holding concern, to be known as the Alberta Co-Operative Elevator company, which shall be the parent of as many smaller companies, composed entirely of farmers, as there are elevators built.

The farmers of any community where it is decided an elevator shall be built, will be organized in a company by the parent body, and the farmers of that particular community will be required to subscribe for all the stock of the company—that is, if \$8,000 or \$10,000 is required to build the elevator, a company, capitalized at that amount will be organized, and the farmers of the immediate vicinity must take all the stock and agree to see to it that a sufficient acreage in the community is under cul-

tivation to support an elevator. The representatives of the farmers agreed that before they will ask the government to advance any money, they shall have at least 20 such companies organized as provided under the foregoing plan.

Premier Sifton gave out this statement at the close of the conference:

"The government had been quite willing that a representative body of farmers should initiate a policy with regard to the elevators, because the government wished to do its best to meet the situation caused by the annual congestion in the moving of the grain crop. Representatives of the United Farmers of Alberta put forward their proposals at the conference and the government will do its best to embody them in a bill."

"The fact that the Canadian Pacific Railway company may establish a system of internal terminal elevators in the province of Alberta, beginning with two 1,000,000-bushel plants in Edmonton and Calgary will not alter our demand for elevator competition," Secretary Fream said. "We do not see how the farmer will profit by shipping grain to an internal elevator unless the carriers undertake to ship it to that point and take care of the extra handling without added expense to the grower."

"The probability is that the railroad will get an extra amount in freight charges by shipping a longer distance than if it were shipped direct to Port

every stalk means 150 bushels of corn to the acre, while last year the average in Kansas was only 21 bushels per acre.

There was only an average stand of 60 per cent in Kansas last year. This is just the same as though a farmer should plow, plant and cultivate 100 acres and not have a stalk on 40 acres of it. There ought to be, according to experts, a 90 per cent stand of corn in Kansas, and proper selection of seed and proper methods will bring it about.

THE NATIONAL CORN EXPOSITION

The fifth national corn exposition at Columbia, S. C., during the two weeks from January 27 to February 8, was not only a complete success but was pronounced by many in attendance to have been the greatest show of its kind ever held. All of the exhibits were housed under one roof. The main building, shown in the accompanying illustration was a steel-frame structure costing \$40,000 and containing 70,000 square feet of floor space. It was erected on the State Fair grounds especially for the National Corn Exposition and held the exhibits of twenty-seven states and four large sections of the government exhibit and the machinery exhibit.

In the east wing of the building were shown the exhibits of the boys' corn clubs and girls' tomato



MAIN BUILDING OF NATIONAL CORN EXPOSITION

William, and will also charge for putting the grain in the elevator at Calgary or Edmonton.

URGE REAPPOINTMENT OF WILLIAM B. MOULTON

William B. Moulton has been for a number of years chairman of the Civil Service Board of Illinois, and in that office has thoroughly demonstrated his capability and efficiency. Realizing that with a Democratic administration in Illinois, new men are likely to be appointed on the board, many are sending in petitions to Gov. Dunne asking that Mr. Moulton be appointed minority member of the board. Since under the law one party cannot have more than two men on the board it is probable that Mr. Moulton will receive the position. Grain dealers are especially interested in this because of Mr. Moulton's splendid co-operation with them in their efforts to raise the standard of grain inspectors, samples, etc.

CORN IMPROVEMENT IN KANSAS

Declaring that in Kansas last year there was only one good ear of corn to every seven stalks, H. M. Cottrell, agricultural commissioner for the Rock Island Railway, announced that a special demonstration train would be run over the Rock Island lines during the latter part of February. The train will not cover all the lines of the Rock Island in Kansas and Missouri, but only in north-eastern Kansas and northwestern Missouri, where conditions are nearly ideal for growing corn.

In outlining the trip Mr. Cottrell stated that the lectures made by the experts making the trip but tend to improve corn-growing conditions. The planting of good seed will be urged. A good ear on

clubs. Adjoining the east wing and connected with it was an auditorium with a seating capacity of 2,500 people. Here the various addresses and lectures on agricultural subjects were delivered. The United States Government had a hall for its moving-picture show and a special room for lectures by the farm demonstration bureau experts. A feature of the various state exhibits was the fact that these were not for the sole purpose of "boosting" the respective states as is the case with so many expositions, but rather simple and effective displays showing just what each state had accomplished in the corn growing line.

Despite a drizzling rain on the opening day a large crowd was present at the simple opening exercises. Addresses were delivered by Thomas C. Thompson, mayor of Chattanooga, Tenn.; S. C. Mitchell, president of the University of South Carolina, and Wade Hampton Gibbes, mayor of Columbia. Following the opening every day had a special program and many interesting addresses were made by prominent speakers including Secretary Wilson of the U. S. Department of Agriculture, and Sir Horace Plunkett, the noted leader of Irish agricultural reform.

Alabama won the National Corn Exposition trophy for the best showing in the girls' and boys' club work during the year 1912. Corn from Indiana was awarded two first prizes. Charles Short of Greensborough, Ind., won the Indian 10-ear trophy, valued at \$1,000, and Joe Helms of Richmond, Ind., was awarded the Kellogg single ear trophy also valued at \$1,000. The Colorado oats trophy for the best peck of oats on exhibition went to J. C. Hill & Son, Lloydminster, Sask., Canada. Wisconsin was awarded the barley championship on Oderbrucker barley grown by H. E. Krueger of Beaver Dam, and on Wisconsin pedigreed barley grown by W. R. Ressler of Beloit.

ADDITIONAL KANSAS CITY STORAGE

John S. Metcalf Co. of Chicago have recently completed the drawings for a 1,600,000-bushel reinforced concrete addition to the 1,000,000-bushel plant designed by the same company and built in 1905 for the Atchison, Topeka & Santa Fe Railway Company at Argentine, Kansas. An office building, carpenter shop and dust packing plant are also included in the permanent improvements, together with such changes in machinery of the present plant as may be necessary. The total estimated cost of the improvements is about about \$300,000.

The work on the addition is already under way and the Armour Grain Company, which is operating the house, hope to have the use of the new tanks for the next grain crop.

DEATH OF WYNN ELLIS

In the death of Wynn Ellis, founder and head of the Ellis Drier Company, which occurred at his home, 129 N. Central Park avenue, Chicago, on February 9, after more than a year of ill health, the grain trade loses one of its most beneficent members. For many years Mr. Ellis had been engaged in perfecting methods of conditioning grain with a



WYNN ELLIS

view to insuring its keeping and shipping qualities, and his success along this line redounded to the benefit of the entire grain trade.

Mr. Ellis was born in Greenwich, England, January 1, 1856, of French and English parentage. His education was received from private tutors and he was given a thorough musical training by one of the most celebrated English musicians. When he was seventeen years old he came to America with his parents, locating at Brantford, Ontario, Canada. He associated himself with the British-American Starch Works, subsequently becoming sole owner of this extensive business.

Mr. Ellis operated the Brantford plant until 1892, when he sold out and removed to Detroit, Mich., where he engaged in the business of handling salvage grain. His operations here were on a large scale, and recognizing the need of more improved methods of drying and conditioning grain he began work on the now well known Ellis Drier. In 1898 Mr. Ellis went to Milwaukee, Wis., where the Paine-Ellis Grain Drier Company was formed and began successfully to market the Ellis Drier.

Upon the dissolution of the company, in 1904, Mr. Ellis came to Chicago and purchased the Rockwell Elevator at Twelfth and Rockwell streets, equipping the house to salvage grain. He also organized the Ellis Drier Company, with offices in the Postal Telegraph Building, admitting his sons, Wynn, Jr., Hubert and Norman, to membership. It was here that the Ellis Drier was brought to its present high

state of efficiency and Mr. Ellis reaped the reward of years of continuous effort.

About a year ago Mr. Ellis' health began to fail and he was compelled to turn over the management of his extensive business to his sons. Fortunately the young men had received an excellent training as drying engineers under their father and the demise of Mr. Ellis will not affect the conduct of the business in any way.

The late Mr. Ellis was married to Anne Jarvis of Brantford in 1882 and the three sons mentioned above are the fruits of the union. They and the widow survive.

[Special Correspondence.]

MAY MOVE PHILADELPHIA COMMERCIAL EXCHANGE

BY E. R. SIEWERS.

For some time past there has been a quiet but systematic movement going on among a number of the leading members of the Commercial Exchange of Philadelphia, the purpose of which is to secure a permanent home for the organization, and on the occasion of the installation of officers, which took place on the grain floor the day following the annual election, Director-elect Winfield S. Woodward responded to the call of his friends by alluding to this important subject in a favorable way and in no uncertain language. It is claimed that under present conditions the Commercial Exchange, which is regarded as the best financed, as well as the leader among the trade associations, is steadily losing its identity by occupying a limited space on the main floor of the big Bourse Building, even though the general facilities received under a leasehold are quite as satisfactory as could be obtained in any large public building of similar character in the city.

The Commercial Exchange moved out of the old building of the Chamber of Commerce, located on Second Street, near Walnut, in which they had an interest, disposing of their equities, and, about the time that the Bourse Building was completed, which now occupies a full square of land running from Fourth to Fifth Street, between Chestnut and Market Streets, in 1895, they made a lease of their present quarters on the north side of the main floor of the Bourse, during the second term of the president, at that time E. L. Rogers, about eighteen years ago.

In 1904, when Walter F. Hagar became president of the Exchange, who, from his wise policy while a director, when president, and member of the Finance Committee, in the earlier years, was known on 'change as the "Watch Dog of the Treasury," he called especial attention to the subject of looking forward to a future home for the Commercial Exchange in an address to the membership. At this time it was decided to increase the limit of the reserve fund that was then approximately \$120,000 to a much larger amount, which was agreed to, the ultimate purpose being to accumulate sufficient funds for the purchase of a site upon which to erect a permanent home building for the Commercial Exchange.

Another plan of enlarging the scope and usefulness of the organization, which has been talked of, is the combining of several of the trade organizations which now have their headquarters in the Bourse Building into one body or federation.

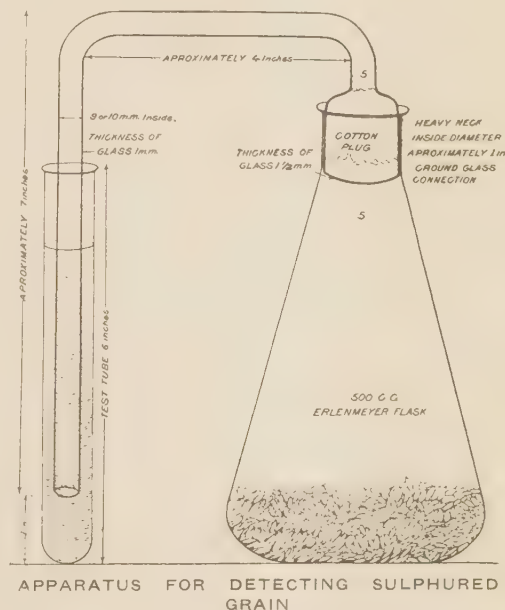
Whether either of these projects will materialize remains to be seen, though it must be said, with the expenditure of the U. S. Government appropriation of \$2,000,000 for the improvement of the rivers and harbors at this port, the erection of a new and modern custom house, the construction of a 1,700-foot Government dry dock at League Island, and the completion of the big grain elevator at Girard Point by the Pennsylvania Railroad Company, and extensive pier, wharf and dockage facilities to be made soon by the municipality, there is a strong feeling among the grain trade in general that the Commercial Exchange, with its nearly three score years of successful business experience behind it, should be entirely equal to the occasion, and place itself at the head of the column and be in line

with the various trade interests, which are expected to profit through the carrying out of the extensive plans.

DETECTING SULPHURED GRAIN

An improved apparatus for detecting sulphured grain is described very thoroughly by George H. Baston, assistant in grain standardization, Washington, D. C., in a recent publication issued by the Bureau of Plant Industry. As is well known, the apparatus commonly in use for this purpose consists of an Erlenmeyer flask of 500 cubic centimeters capacity, fitted with a cork stopper and delivery tube.

The chief objection to this apparatus is that it is almost impossible to make a cork connection perfectly tight and it is also hard to keep clean. The escape of the gas around the stopper was the first difficulty that Mr. Baston tried to overcome. Rubber stoppers are not practicable on account of the sulphur which they contain. A hollow ground glass stopper with a glass delivery tube attached was substituted for the cork. The hollow in the center of the stopper was filled with cotton which acts as a filter, thus preventing the dirt and dust from being carried over with the gas. The dimensions of the



apparatus are shown in the accompanying illustration.

The method used for detecting sulphured grain is as follows: Place 100 grams of the grain to be examined, together with 10 grams of zinc, mossy or granular, chemically pure and free from sulphur, in a 500 c. c. flask. Pour into the flask enough diluted hydrochloric acid (1 part of acid to 4 parts of distilled water, by volume) to just cover the grain.

Close the flask with the ground-glass connection and place the end of the glass delivery tube in a test tube containing a 2 per cent solution of lead acetate (2 grams of chemically pure lead acetate in 98 cubic centimeters of distilled water) which has just been filtered. The test tube should be only about three-fourths full of the lead acetate solution in order to prevent spilling when the gas begins to pass over. The delivery tube should extend to within about 1 inch of the bottom of the test tube.

In the case of unbleached grain the gas liberated from the zinc and hydrochloric acid is hydrogen; with grain which has been bleached with sulphur, the gas freed is hydrogen sulphide. The presence of sulphur is indicated by a black precipitate of lead sulphide which forms in the test tube.

To avoid any mistake in determining whether or not grain has been bleached it is advisable before making the test to make several experiments with both bleached and unbleached grain and also with mixtures of the two. For example, samples containing 2 per cent, 5 per cent, 10 per cent, and 50 per cent bleached grain should be tested, in order to become familiar with the appearance of the precipitate when there is only a small quantity of sulphur present.



Published on the Fifteenth of Each Month

BY

Mitchell Brothers Publishing Co.

OFFICE:

Manhattan Building, 431 South Dearborn Street
CHICAGO, ILL.

HARLEY B. MITCHELL Editor
A. J. MITCHELL Business Manager

Subscription Price, - - - - \$1.00 per Year
English and Foreign Subscription, - 1.75 " "

ADVERTISING.

This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching persons connected with this trade. Advertising rates made known upon applications.

CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

CHICAGO, FEBRUARY 15, 1913.

Official Paper of the Grain Dealers' National Association
and of the Illinois Grain Dealers' Association.

NATIONAL LAKE TERMINALS URGED

Whether or not the government adopts the scheme of Julius H. Barnes, a Duluth grain exporter for the establishment of national lake terminals, the plea of the latter made before the Merchant Marine Committee of the House of Representatives, has served a useful purpose in bringing once more to the attention of the public the high rates on package freight shipped via existing Great Lake steamship lines. It is undoubtedly true as Mr. Barnes sets forth, there are virtually no independent steamship lines on the lakes, all being owned or controlled by the railroads. The latter likewise control the water fronts and terminal facilities of practically all the big lake ports except that part owned by big industrial concerns which operate their own steamers to carry freight in bulk.

It is almost universally known that the actual cost to the carriers of transportation over water is one-sixth of that over land. Water freight rates therefore should be considerably lower than railroad rates, and the fact that they are not leads but to the one conclusion. Bulk shipments of grain cost less than they did some years ago, largely due to improved terminal facilities, but the rates on package freight have been increased and the loading and unloading facilities for the latter are practically what they were forty years ago. Controlling the dockage charges as they do, an independent steamship must pay whatever rate the railroads demand, and an always effective club is thus maintained for keeping up the price of water transportation.

That a national lake terminal would eliminate existing unsatisfactory conditions seems almost certain. That municipal or state ter-

minals would accomplish almost as desirable results is highly probable. For those who dislike the idea of government competition, however, a further solution is offered in the regulation not only of rail and water rates but their relation to each other, a proposition as outlined at the recent convention of the National Rivers and Harbors Congress at Washington. Such a policy on the part of the government could be made thoroughly effective.

SOME VALUABLE FEEDING EXPERIMENTS

Grain dealers are awaiting with considerable interest the results of the experiments now being conducted by experts in the United States Department of Agriculture with reference to damaged corn and oats for stock feeding purposes. It is claimed and in many cases with justification that much disease among horses is due to other causes. It is the first deduction made by some veterinarians in examining supposedly diseased stock and heretofore there has been very little to confute their assertions.

The experiments with heated corn are now fairly well under way. There are groups of four or five healthy horses being fed with the heated corn, and at the same time similar groups are being fed on thoroughly good corn and the results are being noted. Comparisons will be made very closely. Similar experiments are going on with "sulphurized" oats, that is oats which have been bleached with sulphur fumes to give them a lighter and brighter color. There can be no doubt that the issue of the experiments is of almost as much importance to the grain trade as the result of the "bleached flour" controversy was to the millers. For the complete accuracy of the data, the experiments will be carried on over a period of several months before any figures are made public. With the fairness of the tests assured, grain dealers generally are optimistic that the results will be such as not to warrant the prohibition of heated corn and sulphurized oats under the pure food law.

A VITAL BLOW TO THE BARLEY MARKET

One of the distinct sensations during the past month was the seizure by the United States Government of some twenty-six carloads of barley shipped from Minneapolis for export. The charges were that the barley had been adulterated with screenings and weed seeds so as to make it a violation of the Pure Food and Drugs Act. The full force of press bombardment was immediately turned upon the shippers, and such assertions were made relative to adulterating grain that to those conversant with the situation showed a depth of ignorance unbelievable and almost unsurpassed, but to the outside world tended to cast some discredit upon the grain trade in general.

As a matter of fact, knowing that barley is a land clearing crop there is ample reason for its being full of weed seeds and other foreign matter. The average farmer, quick to condemn the big grain elevators, is the one most at fault for the condition of the grain when it reaches the market. He is the last one to realize that the grain elevator by clearing the

dirty grain for him raises the grade and is able to find a market for some otherwise unacceptable stuff. Compelling the farmer to clean his own grain would of course be looked upon as a hardship, but under a liberal interpretation of the decision of the government, following the seizure of the barley, this is virtually what is going to be brought to pass if the producer is to receive full market value.

At the present time the extremely dirty barley can be cleaned at the elevators sufficiently to come within the department ruling. The shippers, however, declare that there is little object in doing this for export barley because foreign buyers want low-priced barley and do not in the least object to the foreign matter in it. What the ultimate outcome of the case will be no one can foretell. The present status is that pending an investigation on the part of the government as to a more satisfactory handling of barley from farm to elevator, no more export shipments will be stopped, but there must be no screenings mixed with the barley after it has been received at the elevator.

SENATOR CUMMINS AND THE LIMELIGHT

By the introduction at this time of a bill to tax short sales of stock and future dealing in grain, cotton and provisions, Senator Cummins lays himself open to the not unwarranted suspicion of playing to the gallery. It is inconceivable to anyone that the Iowa senator with his well established intellectual attainments could imagine for an instant that the proposed measure had any practical value. The explanation to many is that the statesmanlike qualities in the senator are gradually becoming subordinated to the purely political ones, and that the desire to please a large part of his following has caused this sudden dash into the spotlight.

Of the measure itself, little need be said. That it is a species of class legislation largely favored by those either indifferent or inimical to the best interests of the entire grain trade is undoubted. It is also recognized by those familiar with conditions that the bill in its present wording is decidedly unfair and threatens if passed to bring about a similar state of affairs to that prevailing in Germany some eight or nine years ago where somewhat similar legislation was enacted and quite speedily repealed.

Leaving out all faults of the proposed measure it is hard to find any merits in it whatever but rather evidence that it will work a distinct hardship to an important branch of the world's business. It may be that in some obscure corner of the estimable senator's brain there lurked a thought that by this bill, which tends to practically cut off future dealing by reason of the high tax, corners would be prevented. The recent decision of the United States Supreme Court in the Patten case, however, put into the hands of the Federal authorities a very effective weapon with which to frustrate attempts to establish corners. Therefore, while from a standpoint of trading in futures, the Cummins Bill is full of potential possibilities for harm, and in so far as it aims to curb the cornering of the market it is absolutely superfluous.

It may be considered then something in the light of a blessing that the passage of the bill seems improbable even if it should come up to vote which latter event is unlikely. But meanwhile the publicity work is still going on—at the expense of the grain trade.

WILL PLACE THE RESPONSIBILITY FOR DELAYS

Thoroughly optimistic are most of the grain men who are active in pushing the Cary Time Filing Bill now pending in Congress, as to its enactment into law. It will be remembered that this bill was endorsed by resolution at the last convention of the Grain Dealers' National Association, and since that time has received the endorsement of grain exchanges and organizations all over the country. Although many other lines of business are interested in the passage of the bill, its importance to the grain trade cannot be overestimated.

The annoyance and loss which has been experienced by every grain man through delay in receiving telegrams and telephone messages have made the subject of better transmission and more efficient telegraph service a live issue for years. The trouble is that in most cases it has been regarded, quite properly, too, as a local question, and consequently conditions have been investigated, protests and complaints have been recorded, and better service demanded only at those places where delays originated. The result has been that there was no centralized movement looking to betterment of conditions.

The fault for present conditions may or may not lie with the telegraph and telephone companies. In any event, local agitation cannot be expected to accomplish anything of vital importance to the grain trade in general. National legislation of the nature of the Cary Bill, though, cannot fail to effect a considerable improvement. It is not expected that the bill will entirely obviate the present difficulties. Beyond a doubt, however, it will place the responsibility for delays that may occur. The fact that telegraph and telephone companies are required by the bill to keep a record of the exact time a message is received at the sending point and its receipt at the point of delivery assures prompt transmission and furnishes undisputed evidence upon which claims for damages occurring may be based. This all leads up to a greater efficiency in the telegraph service.

THE LAST WORD IN CORN SHOWS

Wholly un-American in plan and scope would be any kind of important competition without a progressive or centralized method of handling it culminating in a final big contest. This element of our national character has been recognized in the great campaign for corn improvement. Where formerly the state, township, or purely local show bestowed honors which the recipients regarded as the maximum of glory, now they are generally regarded as stepping stones merely to the attainment of a still higher ambition—the winning of prizes at the National Corn Exposition. The latter exhibition has now reached a high plane and is

what its name implies, a country-wide show designed purely and simply to be the apex of the pyramid formed by the lesser shows. It is of course obvious that only those who have started at the bottom of this pyramid and worked gradually upward can ever hope to reach the summit. Every corn producer realizes the necessity for the local corn shows, and knows the absolute futility of entering the great national contest without the preliminary experience gained in the sectional exhibits. Therein lies the greatest value of the National Corn Exposition.

That this national show which closed a week ago was held for the first time in its history in the South is of peculiar significance. It indicates most surely the great progress which the South has been making in corn growing. South Carolina was selected because this state holds the world's record for production of corn per acre. The erection of a big steel structure especially for the National Corn Show testifies admirably to the enterprise of South Carolina people as well as to the importance which the show has reached in the eyes of the South as well as the North. The complete success of this year's show should act as a great stimulus to corn production.

MINNESOTA GRAIN INVESTIGATION

Accusations, recriminations, charges and countercharges have featured the investigation of the state grain inspection department, which is being conducted by the lower house in the Legislature during the past three weeks. If sensations count for anything the investigation may be said to have been successful. So far as actual results are concerned, however, the investigating committee seems to be traveling in a circle with nothing definite or tangible accomplished. The leading question which seems to be the foundation for the entire investigation is whether the grain inspection department is operated for the benefit of the buyer or the shipper. No amount of argument appears to be able to convince the farmers that the state grain inspection department is not merely a device for allowing the terminal trader to make an undue profit from him, and, on the other hand, the latter declares that the shipper is always given the benefit of the doubt. It is a firm and fast tradition in all exchanges that the farmer is never satisfied.

Fred W. Eva, head of the state grain inspection department, in commenting upon this, said that his inspectors had been liberal with the farmers and that they were given consideration on every inspection. He said further:

"If the bill now being considered by Congress for a Federal inspection bureau is ever adopted, the farmers will have to meet such a stringent set of rules in wheat inspection that they will receive thousands of dollars less than they are now receiving. I have always contended that the government should fix the rules for inspection. If it did we would have to inspect in strict accordance with these rules, and a proper grade would be made in all cases. Under the present system we have considerable leeway, and we give the farmer the best of it in every instance."

The outcome of the investigation seems somewhat hard to predict. The amount of prejudice so far manifested by each side is bound to develop a bitter controversy. Furthermore, the injection of a new committee by the state senate to work, not in harmony with, but along separate and independent lines, creates a new tangle in the situation. That either committee will effect much good is doubtful. The publicity involved is in no way desirable, and grain men want to see the entire question disposed of. If the grain inspection is at present too severe, as declared, it should be modified so as to work no harm to the producer, but if it is only a case of dissatisfaction on the part of the farmer without just and due cause, prominence should be given to that fact. At all events, let there be a fair and unbiased attitude on the part of the investigators and a careful and conscientious summing up of the facts brought out, so that doubts may exist in the mind of no one.

THE GOVERNMENT SUIT

In these days of strenuous activity on the part of the Department of Justice it is not altogether surprising that the government has instituted suit against the Chicago Board of Trade under the Sherman anti-trust law. It is, however, astonishing that the "call" should be made the basis of the action, since the "call" was devised to encourage competition, and not for the purpose of restraining trade.

The suit, which was filed in the United States District Court on February 12, names as defendants President Edward Andrew and the other officers and directors of the Board of Trade, and asks that the Board and its members be enjoined from fixing the price on grain to arrive. A temporary restraining order is asked for pending the final outcome of the action. It is alleged that through the medium of the call board the Chicago Board of Trade fixes prices on grain during the time that the exchange is not in session, and that the "call" has resulted in a conspiracy and combination to prevent competition.

It is evident that the Department of Justice has experienced a change of heart, as it is asserted that the present bill was prepared more than three years ago, but was pigeonholed upon representations made by J. C. F. Merrill, then president of the Board, and Henry S. Robbins, its attorney. The success of the government in its action against the Chicago Butter and Egg Board may be responsible for the resurrection of the bill, although there is no similarity between the cases, except, perhaps, in the lay mind.

There has never been any secrecy about the "call to arrive." The call board, composed of five members of the Board of Trade, was established about six years ago, and has operated successfully ever since. It meets immediately after the close of the regular trading session each day, and any member of the Board is privileged to bid for the grain he desires to purchase. The prices established by the "call" are competitive in the highest sense of the word, and the system has undoubtedly corrected many evils that existed before it was put into effect.

EDITORIAL MENTION

Missouri farmers took advantage of the parcel post by shipping seed corn to the state corn show through the mails.

The proposal that banks be given power to loan money on grain before it reaches the elevators in western Canada, has, of course, found many champions.

That very healthy infant among grain organizations, the Grain Solicitors' Association, which was born the last month, seems to be developing at a very rapid rate.

Legislation and investigation, turmoil and trouble are considered synonymous terms by many. Certainly the grain trade has had an abundance of each during the past month.

Incidental to the car shortage in Iowa many elevators have been forced to notify farmers that their grain cannot be accepted, the elevators being already full to overflowing.

It cost Kansas \$17,644.458 last year to feed the chinch bugs, according to a recent statement by G. A. Dean, head of the entomology department of the Kansas Agricultural College.

A monument is being urged for Lester Bryant, the champion boy corn grower of Kentucky, who died in Washington recently. A bill to that effect has been introduced in Congress.

Fines aggregating \$50,000 were paid by six men caught in the government's anti-bucket shop crusade in 1910 after the defendants had appealed in vain to the United States Supreme Court.

Will increased demurrage charges help the aided by rains, turned into "whisky wash," and by a certificate as to the condition by the men car shortage situation? The railroads think so, at any rate.

A recent trip through the southwestern part of Georgia, made by P. A. Methvin, State Pure Food Inspector, proved disastrous to many grain dealers, more than 18,000 bushels of corn being condemned.

The Ohio system of weighing grain was complimented recently by a witness testifying before the Interstate Commerce Commission, but he qualified the statement by saying it was due to the "men behind the scales."

That burglars are almost as much to be dreaded as fire in grain elevators is evidenced by the number of robberies reported by elevators during the past month. In several instances quite a financial haul was made.

That New York City is casting longing eyes upon the grain trade of the country and the desirability of being recognized as a foremost grain center is evidenced by recent attempts to have the railroads entering New York allow a little more elasticity in their regulations and

thus permit a wider distribution of grain from that point.

What is thought to be the last chapter in the famous "Patten corner" case occurred this week when James A. Patten, after pleading guilty to one count and having the other seven counts in the indictment nolle-prossed, paid a fine of \$4,000 and ended the long litigation.

The long pending Keystone Elevator case has at last been decided by the Interstate Commerce Commission in about the way everyone thought it would be, all allowances paid by the Pennsylvania Railroad discriminating against other elevators being ordered discontinued.

A local statistician of Council Bluffs, Iowa, has figured that enough grain was handled in the six elevators of that city during the month of January to more than cover 100 farms of 80 acres each. All of which would seem to entitle Council Bluffs to a place on the map.

For the past week there has been almost nothing in the daily press about the gigantic syndicate with hundreds of millions capital to handle the grain crop of the world through a system of big elevators. Can it be possible that the press agents are falling down on their jobs?

A report from Minneapolis says that a thick pine plank in a car of grain, M. & St. L. 8090, unloaded at that place, was mistaken for a coffin and caused considerable excitement for some time. The report was not accompanied by a certificate as to the condition of the men unloading the car.

It is rather well known to grain dealers that oats are higher in important nutrients than corn and about equal to wheat and barley. The National Crop Improvement Service is striving to make this point clear to others throughout the country as well as the fact that oats contain more fat than either barley or wheat.

There will be no grain standardization laboratory in Indianapolis as long as James Wilson is Secretary of Agriculture. This point was made clear recently when the request of the Indianapolis Board of Trade for such a laboratory was refused. Indianapolis is therefore building its hopes entirely upon the new secretary.

A recent bill introduced in the New York by countless friends. More than one association that it will be a distinct loss to Ohio if Mr. but qualified the statement by saying it was harm, and insofar as it aims to curb the corner-legislature making the maintenance and opera-hardware, groceries, furniture, implements and supplies of all kinds.

Preparations for the Panama Canal are going on more extensively in Canada than in this country. The latest to fall in line is the Canadian Pacific Railway, which proposes as a part of its plan to meet the competition of the canal the erection of a system of internal terminal elevators with one million bushels' capacity each, along its lines, at distances of about 200 miles apart. Criticism of the plan is not

lacking, some prominent producers saying that it will only temporarily relieve grain congestion, meanwhile increasing freight and handling charges.

The "Eugenics of Commerce" is a new phrase coined recently by Edward Carhart at the dinner of the oats trade in New York City. Heretofore eugenics has been considered only with reference to the more perfect propagation and development of human beings, but undoubtedly it is just as applicable to business, and now everyone is sorry he didn't think of it first.

The secretary of the Saskatchewan Grain Growers' Association hit the nail rather squarely on the head recently when he said, "If the same energy required to put the grain at Fort William had only been applied to placing it in interior terminal storage and the cars returned at once to the initial points, much suffering and loss would have been saved western shippers."

At last we hear of a railroad acknowledging that there is a profit. The fact that "the railways lose money on every car of grain hauled" can be brought forward no longer as a serious argument, for W. R. McInnes, General Freight Manager of the Canadian Pacific Railway, admitted recently before the Canadian Railway Commission that there was a profit, although not a very large one. The qualification at the end was of course inevitable.

Ohio grain dealers are positive that in the cabinet of President Wilson, when it is announced, will be the name of Hon. A. P. Sandles as Secretary of Agriculture. Mr. Sandles, who is now secretary of the Ohio State Board of Agriculture, is being boomed for the position by countless friends. More than one association, however, especially the various Farmers' Institutes, deplore such a possibility, stating that it will be a distinct loss to Ohio if Mr. Sandles leaves the state.

When the government is through with punishing the big corporations under the Sherman Law it might possibly direct its attention to some farmers in the state of Washington. The only trouble is it appears there is no restraint of trade, because there is no competition. The farmers of Latah, Wash., under the name of the Farmers' Grain and Supply Company, not only handle all the grain of the vicinity, but automobiles, hardware, groceries, furniture, implements and supplies of all kinds.

In line with crop improvement work, Prof. Taff of Iowa has brought matters down to actual figures. He shows the farmers that it costs \$10.14 to raise an acre of oats. The average yield in Iowa has been 29½ bushels per acre. At the market price this brings the total to \$9.74. The straw is counted worth \$1.50, thus making the gross receipts \$11.24 and the net profit \$1.10. Every bushel added per acre above the average of 29½ is therefore clear profit. Figures are everything to many people besides the farmers, and arguments like this are always profitable.

TRADE NOTES

The Texas Ventilated Granary Company of Sherman, Tex., has been incorporated to manufacture ventilated granaries. The capital stock is \$2,500 and incorporators are J. H. Chenault, George Opel, and W. Elliott.

William Ebert, who has been representing the Barnard & Leas Manufacturing Company as mill machinery salesman in southern territory for the past thirteen years, with headquarters in Louisville, Ky., removed to the head office in Moline, Ill., after February 1, as salesman for adjacent territory.

The Southern Construction and Mill Supply Company of Houston, Texas, has just closed the contract with the Sears Feed Milling Company of New Orleans, La., for furnishing the machinery and installing same in the new 100-ton plant which they designed for them. The buildings are almost completed.

The new reinforced concrete buildings of the Barnard & Leas Manufacturing Company, Moline, Ill., are now completed and the machine tools are being installed. The temporary quarters occupied since the fire by the company are now being vacated and the new shops will be in full operation about March 1.

The Ohio Grain Dealers Mutual Fire Insurance Association of Columbus, Ohio, published its eleventh annual statement to its stockholders Feb. 1 for the year ending December 31, 1912. The report was very gratifying to the policyholders and showed total cost of insurance for 1912 at about \$1.30 for each hundred dollars at risk.

The International Sugar Feed Co. of Minneapolis, Minn., reports sales so far this season in excess of last season. In view of the abundance of home grown feeds they regard this as a remarkable fact and clearly demonstrating that International feeds are in line with prices of other feeds and are giving excellent satisfaction to both dealer and consumer.

The Johnson-Schweizer Company, of 25 North Dearborn street, Chicago, has been organized to manufacture the Schweizer Stock Quotation Board in addition to the manufacture of high-class cabinet work for offices, banks, public buildings, etc. The quotation board will continue to be manufactured under the direction of and sold by G. A. Schweizer, who placed the board on the market some time ago.

The Muncie Gas Engine Supply Company, of Muncie, Ind., enlarged its facilities very greatly last year, in order to fill the demand for its Muncie oil engines. Grain elevator operators are well aware of the economy in the use of this type of engine. The Muncie engine uses crude oil, fuel oil, gas oil, solar oil, kerosene or distillate and has an established reputation as a dependable, steady and economical form of power.

T. E. Ibberson, the grain elevator builder of Minneapolis, Minn., is spending a few of the winter months in Florida, visiting for the most part Jacksonville and Tampa. Among the souvenirs he sent home was a small live alligator, a gift to his son E. E. Ibberson. This diminutive amphibian is thriving very well in his Minneapolis home but needless to say is not investigating the St. Anthony in its present state of frozen rigidity.

The Charter Gas Engine Company, of Sterling, Ill., one of the oldest manufacturers of gas and gasoline engines in this country, receive a great many testimonial letters as to the efficiency and economy that follows the use of the Charter engine. A letter of last fall stated that in a period of twenty years of constant use only \$11.00 had been paid out in repairs. When the superiority of the engine which they manufacture today is considered, over that produced by their factories two decades ago, the high-grade quality of this power must be apparent to every power user. The company now

manufactures 100 horse-power engines and smaller for all kinds of work, using gasoline, kerosene, naphtha, distillate or fuel oil gas.

The Burrell Engineering & Construction Co. of Chicago, Ill., will remove its offices from the Stock Exchange Building, on March 1, to Rooms 1102-1108 in the new Webster Building. The building is located at 321 La Salle street, adjoining the Board of Trade Building and will be more convenient to their patrons than the old location. The offices will be fitted for their special use with large, light drafting room and private offices for the various departments of the business.

The *Commercial Chronicle* of Chicago for February contains an interesting article on the pioneer rubber house of the West, W. H. Salisbury & Co., 105-107 South Wabash avenue, Chicago. The firm was established in Chicago in 1855 and incorporated in 1904. It took a leading place in the field of power transmission at the start which it has maintained to the present day. Its style of belt, which is best known to the grain trade, is the "R. F. & C." Solid Woven Rubber Belt, which has grown to be a standard in both large and small grain elevators throughout the country.

The A. T. & S. F. R. R. Co. have contracted with the Missouri Valley Bridge & Iron Co. of Leavenworth, Kansas, to add forty-eight concrete tanks, each 25 feet diameter and 80 feet high, to the Santa Fe Elevator at Argentine, Kan. The present elevator consists of twenty-four tanks of the same size as above named. The total capacity will be 1,700,000 bushels. The Great Western Mfg. Co., Leavenworth, Kan., will furnish the required machinery equipment. GREAT WESTERN MFG. CO., Leavenworth, Kans.

James Stewart & Co., general contractors with head offices in New York City and branch offices in all the large centers of this country and Canada has been incorporated under the same name with a capital stock of \$3,750,000. The new corporation as regards capitalization and amount of yearly business done, ranks among the first of American contracting firms. The firm is one of the oldest contracting companies in this country. It was formed in 1845 in Ottawa, Canada, by James Stewart, a native of Aberdeenshire, Scotland. In 1865 its headquarters were moved to St. Louis and about ten years ago New York became the general office of the firm with district offices in St. Louis, Chicago, Pittsburgh, Montreal, Salt Lake City, New Orleans, Houston and San Francisco. The grain trade is better acquainted with what is known as the Grain Elevator Department of James Stewart & Co. with offices at 1811 Fisher building, Chicago. These are under the management of W. R. Sinks, with R. H. Folwell, engineer. They build grain elevators of any type of construction in any part of the world and have constructed very many of the largest and best grain elevators in this country and Canada.

MAKING THE ELEVATORS DRY

In most every building, no matter what it is to be used for, the builder and owner are confronted sooner or later with the question "how can we make and keep all parts of the building dry?" especially in buildings that are built in localities where moisture is encountered a few feet below the surface of the ground, and where portions of the building, such as elevator pits, boiler pits, or the basement, are right in the wet strata.

Since "Ironite" has been on the market (about 6 years) some great examples of waterproofing have been successfully done with this product in different parts of the United States, and from the

results of these victories over water a big business has grown. "Ironite" today is waterproofing the deep basements (sometimes three stories below grade) in the tall skyscrapers where immense water pressure is always encountered, in reservoirs for storing water for city use, swimming pools, and many other places where the severest conditions are met.

In grain elevator work it is a simple matter to waterproof with "Ironite," because these buildings as a rule do not go down low enough to cause this tremendous water pressure.

To waterproof any part of a grain elevator with "Ironite" you can use the cheapest labor and simply follow instructions as to the method of application.

After the surface to be waterproofed has been brushed off to loosen and remove all foreign matter, wet the wall down thoroughly and apply one coat of "Ironite" and water (about as thick as a thick whitewash) taking care to brush the "Ironite" well into the pores of the material. During the next twenty-four hours this surface should turn from a black to a deep rusty color and should be sprayed a few times to hasten oxidation. The second coat, which is composed of 50 per cent "Ironite" and pure cement, is then brushed on thick and rubbed well into the surface of the wall with a trowel or float and allowed to set.

This treatment is sufficient to stop any seepage and the waterproofing will never scale off, crack, or disintegrate. For damp-proofing storage bins one coat of "Ironite," well brushed in, is sufficient.

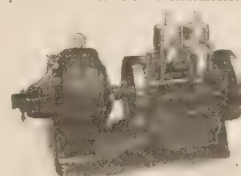
"Ironite" is said to be unaffected by heat or cold, alkalis or acids, and is a perfect insulation in every respect, and once it has been applied you cannot remove it with a chisel. The conditions that "Ironite" has overcome seem endless and one cannot help thinking that it is no wonder that it has met with so much success. It is not expensive either. Waterproofing work will never cost more than 3 to 5 cents a square foot, damp-proofing less, when done with the ordinary cheap labor to be had in the country. It will pay everyone suffering in any way with water to investigate "Ironite" waterproofing. Send in information as to your troubles and area of walls, etc., and have prices submitted as the material necessary by the Chicago Ironite Waterproofing Co., Room 714, 118 N. La Salle St., Chicago.

ELECTRIC LIGHTING FOR GRAIN ELEVATORS

In grain elevators, mills, warehouses and similar places where inflammable and combustible materials are stored, owners should be very careful as to what kind of power and illumination are in use. It is recognized generally that for safety and convenience electric light furnishes 75 per cent less fire risk than all the other illuminants. Among the firms making a specialty of installing electric plants in grain elevators is the G. A. Bauer Company of Chicago. It is well known that the introduction of the modern tungsten filament lamps makes it possible for small lighting plants to use only half the quantity of electricity that was required for the old carbon filament lamps, making these small plants essentially desirable. Dark parts of the elevator can be lighted up before entering, and the lamps can be distributed in any way desired.

The most economical plants are those which have a heavy slow speed engine, and are so arranged that they run at a slower speed for no load than they do at a full load. This means a considerable saving in fuel. The addition of a storage battery is a great help to an equipment of this kind, as the engine can be used to charge up the battery during the day and the battery allowed to take care of the illumination during the night.

The accompanying illustration shows one of the direct-connected sets manufactured by the G. A. Bauer Company, consisting of a two-cylinder gas



BAUER DIRECT-CONNECTED LIGHTING SET

engine coupled to a small dynamo. The cost for installing small electric plants is surprisingly small. A building requiring from 20 to 30 lights does not cost, for the complete electrical equipment more than \$350 to \$400; a building that requires from 30 to 50 lights costs from \$400 to \$500, this figure including power plant storage batteries, lamps, wire, switchboard, and all other accessories completely installed. Complete information regarding these plants will be furnished upon request by the G. A. Bauer Company, 477 W. Erie St., Chicago, Ill.

A NEW GRAPHITE CATALOGUE

In view of the importance which graphite is assuming not only in the industrial world but in every branch of business life, the new catalogue issued by the Joseph Dixon Crucible Company, Jersey City, N. J., is of decided interest to all. It is the largest and most complete production catalogue ever issued by this company and is now being mailed to thousands of manufacturers, jobbers, purchasing agents and others interested in graphite, crucibles, paint, lubricants and other products of the Dixon Company.

Although there are over one hundred pages in the catalogue, which is profusely illustrated, a full description of all the Dixon line is by no means attempted and only the representative products are listed. Peculiar value is attached by the Dixon Company to the production catalogue, by reason of the fact that it serves to acquaint those who are already users of one form of graphite with its many other forms and uses. The catalogue will be sent upon request to anyone interested in graphite products.

KEEP THE FLOORS CLEAN

A device for automatically lubricating the eccentrics of separators has been placed on the market by the S. Howes Company of Silver Creek, N. Y., well known to the grain trade as manufacturers of "Eureka" Grain Cleaning Machines. The following illustration shows a pair of these lubricators fitted to a "Eureka" Compound Elevator Separator.

The novelty, simplicity and efficiency of the new oiling equipment impresses immediately those who see it. With reference to the device the manufacturers say:

"The reason we were forced into getting up a device of this character is simply because the ordinary fast running eccentric, whether it be on a Separator, the shoe of a Clipper, or any similar machine, is admittedly considered the dirtiest contrivance used in an elevator. It throws and spatters oil all over the place. It covers the machine itself, the walls, the floors and elevator legs. Anything and everything with which the oil comes in contact is, of course, permanently disfigured. Given a few years, the floors and all other lumber in the vicinity of such bearings must naturally become oil soaked. Once let a fire get started in such surroundings and it will be next to impossible to check it. A fact which has often come to our attention is that, nine times out of ten, the average elevator fire is caused by a neglected, overheated eccentric.

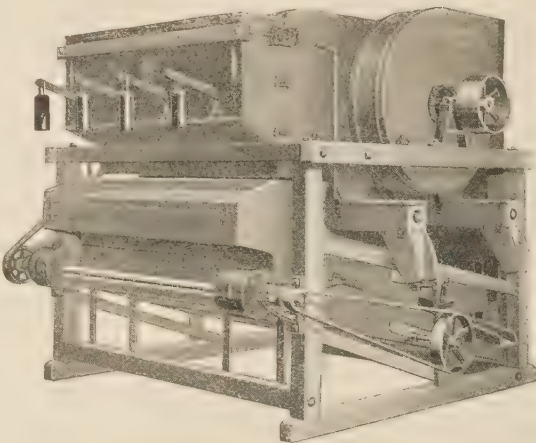
"As is well known, bearings of this character require a great deal more attention than any other that can be named. The operator has to look after them carefully and oil them constantly. This, of course, occupies a good deal of time that might otherwise be well employed.

"The 'Eureka' Automatic Eccentric Oiler does away with these things once and for all. It confines the oil in the bearings where it belongs and, so long as the machine runs, it is all the time pouring a stream of oil on the eccentric. When the separator is at rest the oiling ceases automatically. It will thus be seen that there is no chance for the eccentric to run dry and no possibility of the lubricant leaking out on the floors. The device needs no attention beyond an examination every

two or three months, when it is desirable to draw off the old oil and substitute new.

"In construction the 'Eureka' Eccentric Oiler is very simple. It consists of only three pieces—the disc, the lower housing and the upper housing. The disc is secured to the shaft and revolves with it. The lower half of the housing (or the oil reservoir proper) is bolted to the frame of the machine. The upper housing is hinged to the lower part and contains the oil channel or distributor. The bottom housing is half filled with oil and the disc extends down into the oil and at each motion of the shaft the disc picks it up and throws it upward into the channel, from which it drips direct into the eccentric head. It will thus be seen that we simply depend upon centrifugal action and gravity to do the work."

It is stated that not much argument is necessary to convince a practical elevator man that this automatic oiler effects definite savings amounting to



EUREKA COMPOUND ELEVATOR SEPARATOR
With New Automatic Eccentric Oilers.

more than ten times the original cost, in the course of a single year, by economy in oil consumption, saving in repairs and in employees' time. Break-downs and shut-downs are prevented, too. Equally important is the fact that it safeguards property from fire. The manufacturers call attention to the fact that a well known insurance authority paid them a well deserved compliment recently by saying that this automatic oiler was the one thing he wished every separator was equipped with, as there was no question in his mind but that it greatly reduced the fire risk.

THE COMPETITION OF ARGENTINE

About twenty years ago, the Argentine Republic first came into prominence in the world as a producer of grain, particularly wheat, and it was greatly feared by many that in a comparatively short time she would flood the markets of the world and bring the price down to a level where other countries could not possibly compete. The almost limitless areas of virgin land, capable of producing wheat to be had almost for the asking, her cheap labor, moderate climate, and nearness to seaboard, were all cited as facts pointing to an immense production at a very low cost.

However, none of these fears have been realized. The cheap labor has proved woefully inefficient, and the crops have been visited with rust-blight, mildew, hailstorms, frosts, torrential tropical rains, drought and locusts. The average yield per acre has been below 10 bushels.

Failure to take advantage of modern methods is one of the reasons that Argentina has failed to come up to expectations as a wheat exporter. Much damage is caused to the wheat crop every year after it is harvested by the lack of suitable granaries on the farm and of elevators at the country stations, and even at the large ports of shipment. The Argentine farmer seems to prefer leaving his wheat on the ground in casks, sometimes covered with a tarpaulin and sometimes uncovered, rather than pay elevator charges.

An Argentine railroad erected a few country elevators on the American plan, and they proved

such a dismal failure on account of lack of patronage that it seems unlikely the experiment will be repeated in the near future, although it can easily be demonstrated that the grain crop suffers annually more loss than it would take to properly warehouse it.

The Italian colonists are in the vast majority as wheat raisers, and, to say the least, are very unscientific farmers, though they often amass what they consider a competence. They live very frugally, and in harvest the whole family assists in the work. At harvest time ship loads of Italians go over to assist in the harvest, returning to their native land later.

Practically all of Argentina's wheat goes to Great Britain and the continent, while the bran is sent mostly to Brazil, as it is not required at home, owing to the abundance of native grasses and the alfalfa, which does remarkably well.

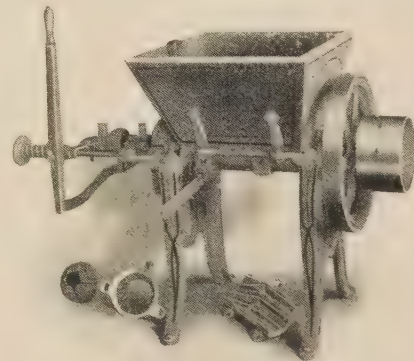
It is predicted that there will be a gradual growth in the production of wheat in Argentina, as new lands are gradually opened up by the extension of the railways. The government is also working to improve the agricultural methods, the low average yield per acre and the antiquated methods of most of the colonists. The variation in Argentina's wheat crop can be seen from the export figures of wheat, and there seems to be no immediate prospect of its becoming more reliable.

In spite of her large amount of cheap land and favorable climate, it seems unlikely that Argentina will become one of the great wheat exporters of the world for some years to come, though her natural advantages must ultimately assure her a prominent place.

A NEW FEED MILL

One of the necessary auxiliaries to many modern grain elevators is a feed mill. Many country elevators are adding them to their equipment if they have not already been installed. A difficulty, however, often arises with reference to the power which must be employed. The owner must be guided very materially in choosing the feed grinder, by the amount of power which is available for the purpose.

In view of this fact, all grain men who have ever experienced the need of a thoroughly reliable feed



NEW SIZE BOWSHER FEED MILL

grinder for use with light power, should be interested in the new size feed mill which has recently been added to the line manufactured by the N. P. Bowsher Company of South Bend, Ind.

The makers designate this new size feed mill as No. 1½. It is a self-fed mill, handling both ear corn and small grain, either separately or mixed and is constructed for use with from 4 to 6 horsepower. It is said to be capable of giving full returns for all power which is applied.

The complete "Bowsher" line now embraces feed mills for use with from 2 to 25 horsepower. In fact it includes a size or style perfectly adapted to almost any requirement that might ordinarily be made upon a feed grinder. The new size, No. 1½, embodies the same principles which have made the other mills of this line so uniformly successful. In both construction and operation it is asserted to be fully able to maintain the favorable reputation earned by the other "Bowsher" mills during the twenty-two years in which they have been on the market.

NEWS OF THE TERMINAL MARKETS

ARE BOARD OF TRADE MEMBERSHIPS TAXABLE?

A delinquent tax proceedings was begun by the state of Minnesota in January in the District Court to enforce payment of 1911 personal property taxes levied against the membership of Sidney A. McPhail in the Duluth Board of Trade. The action is to be a test case and will be carried to the Supreme Court. Mr. McPhail, who was the only member who did not pay the tax, sets forth in his answer to the suit that memberships are not a form of personal property and therefore non-taxable.

Board memberships were placed on the city tax rolls for the first time last year and assessed \$500 each, the rate being based on the selling price of seats, which were quoted at around \$2,500.

WHEAT PRICES COMPARED

C. A. King & Co., Toledo, say in their market report February 7:

Comparisons are often interesting. They are sometimes instructive. Toledo May wheat is 22 cents over Chicago. Patten year was 1909. We were then about 2 cents over Chicago at this time. Last of May we were 24 cents over. Chicago expired \$1.34, Toledo \$1.58, highest since Leiter year, 1898. Scarcity of farm reserves caused the high prices. No two seasons are exactly alike. There will probably be no scarcity of spring or hard winter wheat this May. They are deliverable in Chicago. Soft winter wheat crop was smallest in years. Reserves will probably be extremely small by May. On the other hand, spring and hard winter wheats have been freely substituted for soft winter wheat this season. This restricts demand for Toledo wheat. There was less substitution during the Patten year.

THE FEBRUARY WHEAT OUTLOOK

The special market letter, of late date, of Southworth & Co., Toledo, Ohio, says on wheat:

"February is a conservative. It is a hyphen connecting January and March. It is seldom identified with price fluctuations of importance. What variations appear the next 30 days will be influenced by estimates of March farm reserves; increase or decrease in the visible supply; the condition of winter weather, and the foreign situation. The Balkan War, like the poor, we have with us always, and it is always a possibly disturbing element. March reserves, followed by a large question-mark, are the pivotal point.

"The year 1906, the big twin brother of 1912, with total yield 735 millions, turned over an abundant balance to 1907, whose March farm reserves were 207 million, visible 45 million, total 252 million. Smaller yields of the next five years decreased the reserves almost proportionately; on the face of it 1913 reserves should profit notably by the generosity of 1912.

"But while the 1912 crop exceeded 1911 by 110 million, primary receipts since harvest by the same amount exceeded those of the prior year. Exports for the crop year to date have gained 40 million over 1911, increased consumption and invisible supply receive credit for the balance. The presence in our midst of a record crop was felt early and admitted at once. Prices were cut to the bone and the result came immediately; we lost the greater part of our surplus. Bears have since then been able to make no impression, though only moderate gains have been registered.

"The 'Big Five' 1912 surplus States—Minnesota, the Dakotas, Nebraska, Kansas, hold the answer to the question of reserves. East-of-Mississippi States

require 65 per cent of the 1912 yield for seed and consumption. Little or nothing may be expected from them.

"In February the bulk of Argentine wheat begins to say good-bye to home shores; 160 million is estimated for the total movement. Will this put an end to our exports?

"Winter weather has been abnormal, but not damaging. Perhaps the snow-covering has been too light. Unless February varies greatly from the average the weather will not be a dominate factor before March."

J. H. RIDGE

The newly-elected president of the Peoria Board of Trade, J. H. Ridge, is one of the most successful grain merchants of that market. The predominant characteristic of Mr. Ridge, one might allege, is that he is "on the job" all the time. When you



PRESIDENT J. H. RIDGE

combine steadiness of purpose with experience and judgment, allowing of course for the necessary ingredient of honesty and square dealing, you obtain a resultant that leads to presidencies—maybe of a board of trade, maybe of something else. Anyway Mr. Ridge embraces these requisites in a very large degree and this year he will serve as the president of the Peoria Board of Trade.

Mr. Ridge's experience in the grain business dates from March 1, 1886, when he entered the employ of Bartlett, Knight & Co. at Lafayette, Ind. Outside of two years with W. W. Alder at Lafayette and five years with the Lake Erie & Western Railway, he has been connected with the Bartlett companies continuously. He represented Bartlett, Frazier & Co. on the road from 1894 to 1897, and was with the Trans-Mississippi Grain Co. at Omaha, Neb., from 1897 to 1901, since which time he has been located in Peoria. The first six years he served as manager for S. C. Bartlett & Co., the balance of the time as president and manager of the S. C. Bartlett Company.

BUFFALO MODIFIES UNIFORM GRADES RELATIVE TO MOISTURE TEST

At a meeting of the Board of Directors of the Corn Exchange, Buffalo, N. Y., held on February 7, 1913, the Uniform Grades of Grain were modified as to their application to the moisture test in the grading of corn. Hereafter the percentages of mois-

ture are to be taken as indicating approximately the amount of moisture allowable in the several grades and not as determining the grade of the corn.

The Burns Grain Company of Buffalo has sent out a letter to their customers notifying them of the change and stating that the action means that the grading will be done with due regard for all the grade factors involved. That is, if a car of corn is clean and sound, even though it does carry more moisture than provided in the uniform rules, it may still grade No. 3, whereas corn even if it is dry enough under the uniform rules to grade No. 3 may not be so graded, if it is dirty and unsound.

NEW YORK PRODUCE EXCHANGE TO BENEFIT BY BARGE CANAL

Members of the New York Produce Exchange held a banquet during the past month at which the principal topic of discussion was the new Erie Barge Canal which will be completed very shortly. The most roseate predictions were made as to the effect it would have upon the grain movement in New York. E. T. Cushing, who presided at the banquet, said:

"The brightest spot in our future will come with the completion of the barge canal. The development of the New York Produce Exchange has been coincident with the development of the Erie Canal and the growth of the export business. In the old days of high rail freights the canal gave New York the command of the grain business of the Atlantic seaboard. Later, with the wonderful development in rail transportation, while the canal practically stood still, New York, laboring, under discrimination in rail freights, suffered severely by the diversion of export grain to other ports.

"If the estimates of the capacity of the new canal and the cost of transportation are approximately correct, which there is no reason to doubt, it will dominate the movement of American grain and also compete successfully with the Canadian water routes in carrying Canadian grain."

AN EXCHANGE WANTED AT EDMONTON, ALTA.

John Gillispie, president of the Gillispie Elevator Company and member of the Winnipeg Grain Exchange, said in an interview in the capital city of Alberta that competition is so necessary that Edmonton must have an exchange before many years have passed, adding:

"The longer we are prevented from shipping to Duluth and Minneapolis, the sooner is Edmonton likely to get an exchange. On the first car of barley I shipped last season I would have given the farmer at least \$360 more if I could have shipped it to the markets over the line.

"An effort has been made to establish a grain market at Port Arthur, but beyond some of the firms writing and asking you to ship to them nothing more is heard of it. Of course, the grain has to go through Winnipeg to get to Port Arthur, and all grain is inspected at Winnipeg.

"Winnipeg cannot hope to continue to handle all the grain of the West when it has reached a volume several times as great as it is now. There must be other outlets, and outlets will be provided on the Pacific Coast. The railways that are building through Edmonton to the coast are getting the lowest possible grades because they look to the handling of the enormous wheat exports from Saskatchewan and Alberta.

"All the railways are making Edmonton an objective point. They either start here or make this their main divisional point in the West. They are

radiating from this city on all sides. In two years the Peace River country will be shipping grain into Edmonton and by that time there will be two railways operating between Edmonton and the Pacific Coast.

"From the North and the East, and I believe also from southern Alberta, the grain will be shipped through Edmonton. Calgary has been talked of as a point for a grain exchange, but Calgary has only one through line to the coast and a grade that makes heavy freight too expensive to handle. The Canadian Northern and the Grand Trunk Pacific Railway Companies are building their lines through southern Alberta and linking up all parts of the province with Edmonton. Their main lines to the coast run through Edmonton so that all the traffic will be brought this way. It is probable that the Canadian Pacific Railway Company will also build through to the coast by way of Edmonton.

"It may seem rather early at the present time to talk of Edmonton rivalling Winnipeg as a grain exchange, but I believe that the opening of the lines to the coast and the opening of the Panama Canal will bring the time near when the wheat grown in Alberta and Saskatchewan will be inspected and sold in Edmonton."

THE ACTIVE MEN IN QUINN-SHEPHERDSON COMPANY, MINNEAPOLIS

A little booklet on "Quinn-Shepherdson Service" published last year by Quinn-Shepherdson Co. of Minneapolis, Minn., explains how this firm did in four years what many houses have striven from 14 to 40 years to do. That which was accomplished and which proved so gratifying to the officers of the company was to build up a business from initial small beginnings to present large proportions. The explanation for the steady growth in their business

a corporation with a capital stock of \$100,000, now fully paid.

The officers are J. J. Quinn, president; B. V. Loosemore, vice-president; H. F. Shepherdson, secretary and treasurer. They are all men who have grown up in the grain business. With a full knowledge of the needs of the country shippers, for they have been country shippers themselves, they have a thorough acquaintance of both the buying and selling end of the business.

CHANGES IN MEMBERSHIP

Memphis:—Secretary E. S. Graves reports U. S. Feed & Grain Co. elected member of the Memphis Exchange during January.

Pittsburgh:—Supt. Harry F. Denig of the Grain and Hay Exchange reports Shearer Brothers, 331 Ohio St., Millvale, Pa., received into membership last month.

Richmond:—The Richmond Elevator became a member of the Richmond Grain Exchange during the month as reported by Secretary Y. E. Booker.

Milwaukee:—Secretary H. A. Plumb of the Chamber of Commerce reports the following new members for January: John C. Meivers, Wm. J. Butschau, L. J. Bohmrich, Herman Tuldver. The following memberships were transferred: John E. Wolf, deceased, Carl E. Hansen, W. T. Durand, deceased, Gerhard Winner, deceased, E. D. Norton, J. G. Mueller, L. G. Marstin.

NOTES

A. R. Shannon has been appointed grain inspector of the Chamber of Commerce of Columbus, Ohio.

The Early & Daniel Co., the Union Hay & Grain Co. and Gale Brothers of Cincinnati, Ohio, are among the sufferers from the recent floods in that market. Half a dozen of the largest grain elevators in the

drew as an Economy and Efficiency Committee for the Board, as was suggested at the last annual meeting.

Ward & Harper are now managing the branch office at Marshalltown, Iowa, for Ware & Leland of Chicago. They have offices in the Tremont Building.

Henry A. Foss was reappointed weighmaster of the Board of Trade of the City of Chicago at a meeting of the board of directors of that institution held the latter part of January.

The Regina Grain Co., Ltd., has been organized to engage in the grain business at Regina, Sask., Canada. The business is being conducted under the management of E. E. Quigley.

McCord & Kelly of Columbus, Ohio, are remembering their friends and patrons again this year by a travel accident insurance policy which affords protection for the holder to the amount of \$2,500 for one year from date of registration.

Two complaints were lodged against John Weber of Kansas City, Mo., recently for alleged operation of a bucket shop. Weber had a grain business in the basement of the New York Life Building. He was also charged with making trades without affixing the state stamp.

The new officers of the Board of Trade of Louisville, Ky., are L. C. Murray, president. Vice-presidents are: William Heyburn, John J. Saunders, James M. Johnson, Bernard Bernheim, R. A. Peter. Oscar Fealey was re-elected treasurer and James F. Buckner, Jr., superintendent and secretary.

H. I. Baldwin & Co. of Decatur, Ill., have a useful novelty for their friends this year in the form of a key ring. Unlike the regulation ring, it is made as a close-linked chain with a patent fastening. The bisected ear of corn, with which all patrons of H. I. Baldwin & Co. are familiar, is linked to the ring.

The election at the Cotton Exchange and Board of Trade of Galveston, Texas, resulted as follows: J. H. Kempner, president; A. Muller, vice-president; George Sealy, treasurer; H. Hickman, secretary; directors, F. B. Van Horton, John Wells, W. Holt, W. R. A. Rogers, Eustace Taylor, S. Sgitcovitch, W. L. Beadles.

The annual election of the Memphis Merchants Exchange took place the latter part of January and resulted as follows: H. J. Parish, president; J. Bright Horton, vice-president; directors, E. R. Barrow, Ben Der Brode, L. R. Donelson, Jr., W. A. Turner, A. K. Burrow, R. B. Buchanan, M. G. Buckingham, Emmett S. Goss.

Charges of bucket shopping trades were preferred on February 5 by John Hill, Jr., member of the Chicago Board of Trade, against board members Frank M. Bunch and Mark Bates, president of W. G. Press Company. Both Messrs. Bunch and Bates emphatically denied violating any of the rules of the Chicago Board of Trade and stated they would welcome any investigation from any source.

John E. Bellot was elected president of the Chicago Board of Trade Club at the third annual meeting of that organization held at the Auditorium Hotel late in January. Other officers are: Robert Buckley, vice-president; J. F. B. Robertson, secretary; L. C. Brosseau, treasurer. Executive committee: C. E. Timberlake, K. S. Templeton, A. F. Gearhart, C. T. Hulburd, P. J. Brennan.

In seeds Toledo continues to hold its place as the leading seed market of the United States. Total receipts of all kinds of seed were 106,003 bags, a gain of about 40 per cent over 1911 when 74,807 bags were received. The greatest increase occurred in timothy, a market for which is gradually being developed by Toledo dealers. A huge crop more than doubled the receipts of this article.

At a meeting of grain merchants, business men and members of the Toledo Produce Exchange, Toledo, Ohio, the latter part of January, it was decided to arrange for a Corn Show to be held at Toledo at a future date. A committee from the Chamber of Commerce, one also from the Produce Exchange, will act with a committee consisting of



lay in the service they rendered their customers in handling their cash business and orders in futures and we present the officers of the company in the illustration accompanying this sketch.

On July 1, 1908, J. J. Quinn and H. F. Shepherdson formed a co-partnership for carrying on a grain commission business at Minneapolis, planning to found the business on the principle of close personal service. About the end of the first six months B. V. Loosemore became connected with the company and with the opening of the season on September 1, 1910, the firm was changed from a co-partnership to

city, it was reported, were surrounded by water and out of commission.

Charles E. King was elected president of the Port Arthur Board of Trade at the annual meeting of the board held recently.

George E. Marcey, president of the Armour Grain Co. of Chicago, is spending a short time away from business on his fruit farm near Pasadena, Calif.

H. N. Sager, J. A. Bunnell, W. S. Jackson, Walter Fitch and A. S. White of the Chicago Board of Trade were appointed by President Edward An-

THE AMERICAN ELEVATOR AND GRAIN TRADE

D. W. McMillen of Van Wert, U. S. Dickerson of Adrian, Mich., and T. P. Riddle of Lima to arrange for the show. If present plans are carried out a Corn Show will be held which will eclipse all former Corn Shows held in the state.

The Merchants' Exchange Association of Calgary, Alberta, Can., voted recently for the drafting of a bill to be submitted to the Legislature providing for an official grain inspection system in that market. The committee appointed to draft the bill was composed of A. Cohn of the Northern Grain Co., Robert Kennedy of the Pacific Coast Elevator Co., and R. J. Patterson of Albers Brothers Milling Co.

Some slight changes were made recently in the grades of oats and corn on the Grain and Hay Exchange of Pittsburg. "Sample" was substituted for "No established grade" oats. "No. 4 Yellow Shelled Corn" and "No grade" were eliminated, "sample grade" substituted therefor. Not more than 18 per cent moisture was changed to 19 per cent in the grading of No. 3 Yellow Shelled Corn.

The officers of the Montreal Board of Trade for 1913 are Huntly R. Drummond, president; R. J. Dale, first vice-president; Joseph Quintal, second vice-president; George F. Benson, treasurer. Members of the Council—A. Hamilton Gault, Z. Herbert, Ross McMaster, Arthur H. Campbell, John H. Scott, W. W. Hutchison, H. B. Walker, Alfred Chaplin, Alex. Dick, J. W. Evans, D. A. Campbell, A. McKim.

The Milwaukee Chamber of Commerce publication "Doings in Grain," in a recent issue says: "Milwaukee will come in for her just share of the commercial harvest, because of her favorable position along the great avenues of trade and also as a result of her reputation for honesty and fair dealing. The members of the Chamber of Commerce stand ready to accelerate the car of progress. Milwaukee hoppers are open and catch the streams of grain which have begun to come this way. Farmers and shippers may rest assured that whatever goes into these hoppers will come out in full measure, honestly graded and worth every cent called for by its quality. The buyers are here and their money is ready."

The grain men of Seattle, Wash., are desirous of securing a larger amount of consigned grain to that market, and with this end in view the president of the Merchants' Exchange appointed a special committee consisting of J. A. Pease, A. E. Sutton and W. W. Harder to revise the rules of the Exchange, making it possible for the establishment of a consignment market in Seattle. The grain men of Seattle say that up to the past year when the bulk of grain shipments went to other points on the Pacific coast such a market was not needed, but with the rapidly increasing shipments to Seattle, as shown by comparative figures issued by the Exchange, steps must be taken to increase the grain receipts. The proposed plan includes attracting other grain brokers to Seattle and making a larger market for those now there.

The champion girl corn grower of the entire South was Miss Pauline Way of Notasulga, Ala., who raised on her father's farm, 114½ bushels of corn in a single acre.



WILL THE "CROP SCARE" MEDICINE HELP MR. BULL?

From Zahm's Red Letter for February 8, 1913.

RECEIPTS AND SHIPMENTS

Following are the receipts and shipments of grain, grain products, hay and seed at leading receiving and shipping points in the United States for the month of January, 1913:

MILWAUKEE.—Reported by H. A. Plumb, Secretary of the Chamber of Commerce.

Receipts		Shipments	
Articles.	1913.	1912.	1913.
Wheat, bu....	833,600	344,400	603,185
Corn, bu....	1,948,180	564,170	1,573,222
Oats, bu....	961,200	593,600	1,204,252
Barley, bu....	2,345,200	954,200	729,723
Rye, bu....	267,300	311,680	353,953
Tim. seed, lbs.	180,000	164,135	210,000
Clover seed, lbs.	332,755	252,155	1,350,000
Flaxseed, bu....	96,000	66,000	192,120
Hay, tons....	5,322	3,924	504
Flour, bbls....	84,250	253,500	159,725

DULUTH.—Reported by Chas. F. MacDonald, Secretary of the Board of Trade.

Receipts		Shipments	
Articles.	1913.	1912.	1913.
Wheat, bu....	6,611,298	707,587	1,354,734
Corn, bu....	264,873	220,912	424,881
Oats, bu....	474,017	715,458	421,208
Rye, bu....	28,969	12,683	56,990
Flaxseed, bu....	1,363,663	690,770	389,994
Flour, bbls....	.....	.....	86,325
Flour, bbls., produced	80,580	40,385	.....

BOSTON.—Reported by James A. McKibben, Secretary of the Chamber of Commerce.

Receipts		Shipments	
Articles.	1913.	1912.	1913.
Flour, bbls....	227,779	156,926	83,059
Wheat, bu....	1,108,287	181,569	1,249,969
Corn, bu....	858,507	653,115	558,125
Oats, bu....	375,312	372,252	2,840
Rye, bu....	3,150	1,100	30,348
Barley, bu....	14,211	4,565	214,181
Flaxseed, bu....	23,520	.....	40,665
Peas, bu....	38,646	10,682	729
Millfeed, tons.	1,360	825	191
Corn meal, bbls.	5,415	3,990	2,157
Oatmeal, cases	14,376	4,170	13,006
Oatmeal, sacks	29,734	46,421	21,863
Hay, tons....	14,190	11,880	2,765

CINCINNATI.—Reported by W. C. Culkins, Supt. of the Chamber of Commerce.

Receipts		Shipments	
Articles.	1913.	1912.	1913.
Wheat, bu....	321,049	160,354	111,658
Corn, bu....	805,652	1,284,168	475,169
Oats, bu....	854,315	306,250	524,025
Barley, bu....	95,832	45,280	58,004
Rye, bu....	46,332	105,816	12,296
Tim. seed, 100-lb. bags....	958	1,524	2,838
Clover s'd, 100-lb. bags....	5,048	1,983	4,058
Other grass s'd, 100-lb. bags....	23,187	21,174	23,253
Flaxseed, 100-lb. bags....	58	20	66
Broomcorn, lbs.	705,770	1,986	82,609
Hay, tons....	17,702	13,866	9,325
Flour, bbls....	110,580	91,082	80,423

NEW YORK.—Reported by H. Heinzer, Statistician of the Produce Exchange.

Receipts		Shipments	
Articles.	1913.	1912.	1913.
Wheat, bu....	3,562,000	.....	5,241,259
Corn, bu....	1,568,625	.....	1,939,230
Oats, bu....	1,330,400	.....	1,094,934
Barley, bu....	392,700	.....	888,662
Rye, bu....	62,100	.....	35,922
Tim. seed, bags	.....	.....	4,699
Clover s'd, bags	6,142	.....	11,653
Flaxseed, bu....	488,800	.....	201,019
Hay, bales....	26,654	.....	11,914
Flour, bbls....	791,559	.....	417,150

GALVESTON.—Reported by John H. Upschulte, Chief Inspector of the Cotton Exchange and Board of Trade.

Receipts		Shipments	
Articles.	1913.	1912.	1913.
Wheat, bu....	1,048,000	86,000	1,407,440
Corn, bu....	62,000	12,000	20,677
Kaffir corn, bu.	.....	.....	59,982
Rye, bu....	10,000	.....	17,142
Flour, bbls....	.....	.....	29,827

INDIANAPOLIS.—Reported by Wm. H. Howard, Secretary of the Board of Trade.

Receipts		Shipments	
Articles.	1913.	1912.	1913.
Wheat, bu....	113,400	172,400	3,600
Corn, bu....	2,100,000	1,837,200	504,000
Oats, bu....	147,000	739,500	48,000
Rye, bu....	2,000	1,000	.....
Hay, cars....	164	71	.....
Flour, bbls....	.....	.....	30,111

TOLEDO.—Reported by Archibald Gassaway, Secretary of the Produce Exchange.

Receipts		Shipments	
Articles.	1913.	1912.	1913.
Wheat, bu....	203,000	230,000	330,500
Corn, bu....	519,200	594,000	188,400
Oats, bu....	408,600	135,000	258,600
Barley, bu....	1,000	1,000	134,500
Rye, bu....	2,000	.....	500
Tim. seed, bags	1,190	18	644
Clover s'd, bags	3,181	3,420	7,519
Alsike s'd, bags	223	350	728

CHICAGO.—Reported by J. C. F. Merrill, Secretary of the Board of Trade.

Receipts		Shipments	
Articles.	1913.	1912.	1913.
Wheat, bu....	3,356,000	562,900	2,650,000
Corn, bu....	21,937,000	12,914,350	14,076,000
Oats, bu....	11,327,000	5,241,600	9,124,000
Barley, bu....	3,685,000	1,887,300	1,403,000
Rye, bu....	276,000	159,000	190,000
Tim. seed, lbs.	2,361,000	791,700	3,313,000
Clover seed, lbs.	493,000	330,900	502,000
Other grass seed, lbs....	1,240,000	805,100	1,784,000
Flaxseed, bu....	138,000	175,900	51,000
Broomcorn, lbs.	3,954,000	383,900	2,000,000
Hay, tons....	29,775	22,029	3,055
Flour, bbls....	935,000	423,894	504,000

PEORIA.—Reported by John R. Lofgren, Secretary of the Board of Trade.

Receipts		Shipments	
Articles.	1913.	1912.	1913.
Wheat, bu....	267,000	48,035	271,749
Corn, bu....	2,820,267	2,816,535	2,836,587
Oats, bu....	1,211,200	441,600	1,105,893
Barley, bu....	333,200	156,000	236,185
Rye, bu....	61,200	22,000	52,200
Millfeed, tons.	6,010	5,119	8,676
Seeds, lbs....	150,000	.....	180,000
Broomcorn, lbs.	75,000	15,000	135,000
Hay, tons....	5,682	2,710	995
Flour, bbls....	177,555	180,309	191,735

BALTIMORE.—Reported by Jas. B. Hessong, Secretary of the Chamber of Commerce.

Receipts		Shipments	
Articles.	1913.	1912.	1913.
Wheat, bu....	2,219,625	453,812	2,757,782
Corn, bu....	5,547,727	3,745,438	4,094,946
Oats, bu....	1,363,127	156,455	742,004
Barley, bu....	8,739	.....	.....
Rye, bu....	183,319	37,730	25,714
Tim. seed, bu.	2,248	.....	1,349
Clover seed, bu.	260	2,353	836
Hay, tons....	4,653	6,064	667
Flour, bbls....	194,543	137,547	120,801

PHILADELPHIA.—Reported by Frank E. Marshall, Secretary of the Commercial Exchange.

Receipts		Shipments	
Articles.	1913.	1912.	1913.
Wheat, bu....	2,530,522	1,064,792	2,552,616
Corn, bu....	604,493	373,173	2,385,456
Oats, bu....	1,012,772	599,448	49,776
Barley, bu....	110,206	1,000	231,250
Rye, bu....	10,100	11,200	.....
Flaxseed, bu....	305,934	.....	677,544
Hay, tons....	7,909	7,217	.....
Flour, bbls....	297,334	173,929	192,385

OMAHA.—Reported by F. P. Manchester, Secretary of the Omaha Grain Exchange.

Receipts		Shipments	
Articles.	1913.	1912.	1913.
Wheat, bu....	1,573,200	824,400	1,128,000
Corn, bu....	3,630,000	2,467,200	2,162,600
Oats, bu....	1,528,300	748,000	1,513,500
Barley, bu....	43,400	3,300	31,000
Rye, bu....	40,700	208,600	9,000

KANSAS CITY.—Reported by E. D. Bigelow, Secretary of the Board of Trade.

Receipts		Shipments	
Articles.	1913.	1912.	1913.
Wheat, bu....	1,069,200	2,653,200	1,149,600
Corn, bu....	3,056,250	1,981,250	1,796,250
Oats, bu....	510,000	793,900	588,200
Barley, bu....	19,600	9,800	30,800
Rye, bu....	3,300	19,800	.....
Kaffir corn, bu.	255,200	610,500	226,000
Beans, tons....	4,600	1,220	4,660
Flaxseed, bu....	1,000	.....	2,300
Hay, tons....	39,840	30,528	4,260
Flour, bbls....	17,000	18,500	109,750

MONTREAL.—Reported by Geo. Hadrill, Secretary of the Board of Trade.

Receipts		Shipments	
Articles.	1913.	1912.	1913.
Wheat, bu....	352,135	96,414	306,680
Corn, bu....	5,852	10,864	18,844
Oats, bu....	52,846	181,126	72,770
Barley, bu....	3,783	55,136	3,783
Rye, bu....	.....	1,250	12,550
Flaxseed, bu....	13,252	61,565	4,213
Flour, sacks....	26,118	52,164	6,896

MINNEAPOLIS.—Reported by H. W. Moore, Statistician.

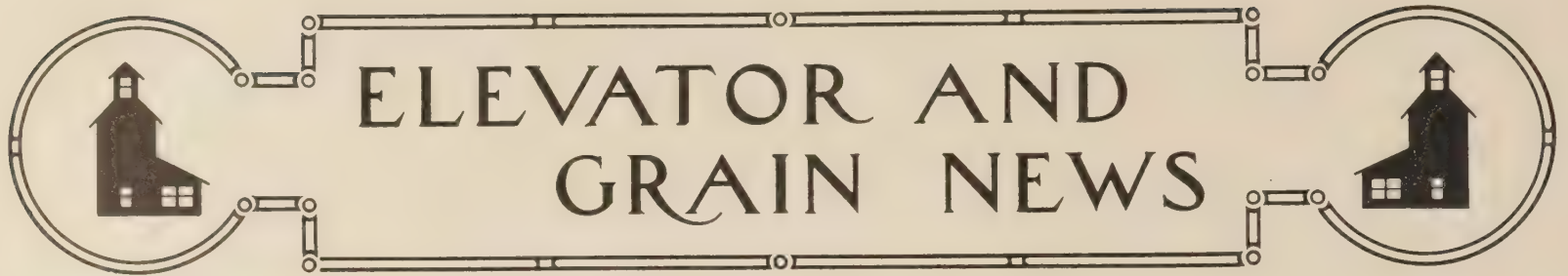
Receipts		Shipments	
Articles.	1913.	1912.	1913.
Wheat, bu....	10,232,000	8,101,510	3,711,140
Corn, bu....	1,172,440	981,130	925,220
Oats, bu....	1,637,380	954,680	1,580,280
Barley, bu....	3,492,780	1,266,800	4,597,750
Rye, bu....	411,320	134,500	286,200
Flaxseed, bu....	1,450,480	530,790	296,580
Hay, tons....	3,790	6,910	510
Flour, bbls....	76,831	54,025	1,634,610

DETROIT.—Reported by M. S. Donovan, Secretary of the Board of Trade.

Receipts		Shipments	
Articles.	1913.	1912.	1913.
Wheat, bu....	146,000	97,700	285,000
Corn, bu....	662,600	437,200	397,800
Oats, bu....	268,000	261,600	5,500
Barley, bu....	3,000	19,800	60,000
Rye, bu....	2,000	5,600	9,250
Flour, bbls....	29,900	17,884	39,800

SAN FRANCISCO.—Reported by T. C. Friedlander, Secretary of the Chamber of Commerce.

	Receipts		Shipments	
Articles.	1913.	1912.	1913.	1912.
Wheat, lbs.	255,523	.....	765	.....
Corn, lbs.	12,718	.....	177	.....
Oats, lbs.	41,890	.....	.....	.....
Barley, lbs.	267,809	.....	235,015	.....
Rye, lbs.	1,295	.....	.....	.....
Hay, tons.	7,085	.....	1,107	.....
Flour, bbls.	103,343	.....	61,965	.....



ILLINOIS

The Farmers' Elevator has been completed at Roberts, Ill.

The Goldfarm Grain Company of Gardner, Ill., has been dissolved.

Charles Henn of Borton, Ill., will erect an elevator at Ashland, Ill.

Charles E. Thrasher has sold his elevator at Paxton, Ill., to Indiana parties.

Henn & Beggs have completed the construction of their elevator at Oakland, Ill.

The Kerrick Grain Company, Kerrick, Ill., has declared a 15 per cent dividend.

Meyers & Shank have taken over A. F. Annan's grain business at Pearl City, Ill.

The Farmers' Grain and Coal Company of Green Valley, Ill., may erect an elevator.

The Mahomet Grain Company, Mahomet, Ill., has discontinued its implement business.

Archie Gilmour and Clarence Cuthbertson are building an elevator at Newman, Ill.

The Farmers' Grain Company of Tabor, Ill., purchased an acre of land recently for \$600.

The elevator at Sidney, Ill., has again changed hands, the new owner being L. B. Saffer.

The Cleveland Grain Company of Champaign, Ill., has installed the machinery in its new house.

Arthur Boyle has sold the grain business at Plainview, Ill., to J. J. Korhler who has taken possession.

The new elevator at Ellis Corners, near Platteville (R. F. D. from Yorkville), Ill., has been completed.

Lamson Bros. & Co. of Peoria, Ill., have opened a grain office at Rockford, Ill., with Guy Luke in charge.

The Golden Elevator and Mill Company has been incorporated at Golden, Ill., with a capital stock of \$50,000.

The Farmers' Elevator Company of Yorkville, Yorkville, Ill., has increased its capital stock to \$20,000.

Geo. O. Coffman has sold his elevator and grain business at Bentley, Ill., to Felgar & Son of Decatur, Ill.

W. C. Brokaw has taken over the elevator business of J. M. Ennes at Princeton, Zea, Clarion and Meriden, Ill.

The Nanson Commission Company of St. Louis, Mo., has built a concrete elevator at Maey's (R. F. D. from Fults), Ill.

It is reported that the Farmers' Elevator Company will build an elevator at Joliet, Ill., on property recently purchased.

The National Elevator Company will rebuild the elevator that was burned recently at Garnes (R. F. D. from Cherry Point), Ill.

At a recent meeting of the stockholders of the Towanda Grain Company, Towanda, Ill., a dividend of 15 per cent was declared.

The Meadows Grain and Coal Company has been incorporated at Bloomington, Ill., by John Streid, Andrew Buller and E. Oyer.

J. E. Smiddy of Colusa, Ill., has purchased the elevator at Lacrosse, Ill., formerly operated by L. Smiddy, who will continue in charge.

W. C. Thompson of Moweaqua, Ill., has traded his half interest in the elevator owned by Thompson & Housh with Simon Primmer, for land.

The National Elevator Company has begun work on the reconstruction of the elevator that recently burned at Mortimer (R. F. D. from Chrisman), Ill.

The Bristol Farmers' Elevator Company has been incorporated at Bristol, Ill., with a capital stock of \$7,000. The incorporators are J. F. Windett, J. W. Rider and G. B. Raymond.

The Farmers' Grain Company of Massbach, Ill., is preparing to erect an elevator about one mile west of Massbach (Meyers) on a new extension of the North-Western Railroad. The house will have a capacity of 15,000 bushels.

A farmers' co-operative grain company is being formed at Hubley's Station on the new Peoria-Girard branch of the North-Western Railroad. John Behrends, A. Donaldson, John H. Keest, E. C. Claypool, and John Hubley are interested in the project.

A feature of the Stockmen's and Corn Growers' convention was the hanging of a portrait of Isaac Funk of McLean County, Ill., in the Farmers' Hall of Fame in the University of Illinois.

The Farmers' Co-operative Grain and Coal Company has been incorporated at East Sweetwater, Ill., with a capital stock of \$7,000. The incorporators are T. H. Alkire, J. W. Terhune and F. W. Goff.

The Stanford Grain Company, Stanford, Ill., held its annual meeting recently. Its officers for the year are: Thomas Outlaw, president, and Edward Miller, secretary. Two new directors were elected, H. A. Pantlen and Julius Freitag.

Maurice Herbert, who has been engaged in the grain business at Polo, Ill., for the past 16 years, has withdrawn his interest in the business, which he and James Hackett have been conducting, and Mr. Hackett will continue the business alone.

The Sparks Milling Company of Alton, Ill., is building a 300,000-bushel reinforced concrete storage house in connection with its milling plant. It is located on the opposite side of the street from the mill and will be connected thereto by means of a belt conveyor and transfer spout. The storage plant will consist of cylindrical tanks, 25 feet in diameter and 80 feet high, surmounted by a reinforced concrete cupola with a belt conveyor for filling the bins. The machinery equipment will be driven by a Corliss engine, which will be supplied with steam from the present mill boilers. There will be two elevator legs of 8,000 bushels' capacity each, a hopper scale of 1,500 bushels' capacity, a car-puller and the usual equipment of conveyors. Work has been commenced by the contractors, the Macdonald Engineering Company of Chicago, and will be pushed to completion as rapidly as weather conditions will permit.

IOWA

The Farmers' Elevator Company has been organized at Sheldahl, Iowa.

An elevator at Minden, Iowa, has been purchased by a Mr. Mann of Atlantic, Iowa.

Jas. Fender has bought H. P. Johnson's grain and coal business at Avoca, Iowa.

An elevator may be erected at Lake Mills, Iowa, by the Lake Mills Lumber Company.

The Farmers' Elevator Company will erect a 50,000-bushel elevator at Williams, Iowa.

The Farmers' Elevator Company contemplates the erection of an elevator at Belmond, Iowa.

The Gilmore Grain and Elevator Company of Gilmore City, Iowa, has installed a grain tester.

An elevator is under construction at Brownville, Iowa, a new town between Tyndall and Springfield.

The Farmers' Elevator Company of Panora, Iowa, has secured the old Wright & McWhinney Elevator.

The Bucklen & Maxson Company has succeeded the Bucklen-Tabor Company at Marble Rock, Iowa.

A Farmers' Co-operative Elevator Company is being organized at Renicker, near Webster City, Iowa.

The A. D. Hayes Company of New London, Iowa, has purchased the Miller Elevators at Packwood, Iowa.

The Farmers' Elevator Company has completed an elevator at Grinnell, Iowa, to replace the old house.

G. Ives & Sons have remodeled their elevator at New Boston, Iowa, and a separator has been installed.

E. J. and C. J. Soderlund have purchased the elevator and grain business of Wm. H. Williams at Madrid, Iowa.

Clarence Ramsey and Selmar Espelund of Meltonville, Iowa, will build an elevator. They have purchased an engine.

The elevator at Fairfield, Iowa, formerly owned by Mrs. E. A. Miller, has been taken over by parties at Wayland, Iowa.

The directors of the Sergeant Bluff Farmers' Elevator Company at Sergeant Bluff, Iowa, have awarded the contract for the erection of a 25,000-bushel elevator and it will be equipped with a Fair-

banks-Morse 20-horsepower oil engine, a five-ton scale, a 1,500-bushel automatic scale, etc.

W. A. Robinson of Emmiston, Ill., has been associated with Harry Drew in the grain and stock business at Greene, Iowa.

Peter Ehlers, who has been in the grain business at Minden, Iowa, for the past 36 years, has disposed of his elevator to his son, Louis.

Webster Mains has sold his interest in the grain business at Silver City, Iowa, to his partner, C. H. Kruse, who will continue the business.

The Commercial Club of Ames, Iowa, has been discussing the prospects for the erection of a new elevator. Charles Dragoun is secretary.

The elevator erected by the Davenport Elevator Company at Oakville, Iowa, is now complete and business has begun with W. T. Lewis in charge.

Soderlund Bros., who recently purchased the elevator and grain business of Wm. H. Williams at McGregor, Iowa, took possession about February 1.

The Charlotte Coal and Grain Company has been incorporated at Charlotte, Iowa, with a capital stock of \$10,000. The incorporators are G. W. Beeby and F. L. Butzloff.

L. L. Brikett of West Liberty, Iowa, has associated with William Felkner of Downey, Iowa, in the ownership of the elevator at Downey, under the firm name of Felkner & Co.

The Iowa-Dakota Grain Company has been incorporated at Sioux City, Iowa, with a capital stock of \$25,000. The officers are: J. H. McKeane, president; F. E. Sweetser, vice-president, and W. H. Harter, secretary and treasurer.

The Shotwell Manufacturing Company of Chicago, Ill., has completed its corn elevator at Arthur, Iowa. It represents an outlay of \$50,000, and has a capacity of 4,612,000 pounds of popcorn. There are eight cribs, each 160 feet long, 10 feet wide and 16 feet high.

The warehouse of the Droge Elevator Company at Council Bluffs, Iowa, which was burned recently, is being remodeled. The entire front of the building is being refaced with pressed brick and a concrete floor will be laid. The improvements will cost approximately \$4,000.

The Bowles & Billings Grain Company of Marshalltown, Iowa, will build an elevator, fuel and feed sheds, and an office at Marietta, a new station on the M. & St. L. R. R., early in the spring. The house will have a capacity of 12,000 bushels and fuel, mill feeds and flour will be handled in addition to grain.

The Farmers' Elevator Company of Scarville, Iowa, has awarded a contract to the Burrell Engineering and Construction Company of Chicago, for the building of a 20,000-bushel elevator of cribbed construction. It will be equipped with an eight-horsepower gasoline engine, a Reliance Automatic Scale and a wagon scale.

The Farmers' Grain and Seed Company of Lamoni, Iowa, is building a 20,000-bushel elevator. The equipment includes a B. S. Constant Sheller and Cleaner, a Fairbanks Wagon Scale, an automatic scale and electric motors. The contract for the erection of the house was placed with the Burrell Engineering and Construction Company of Chicago.

CANADIAN

The new drying plant of the Thunder Bay Elevator at Port Arthur, Ont., has been completed.

The elevator at Fort William, Ont., owned by the late A. E. Fenton, has been purchased by A. F. Guy and associates.

G. D. Atkinson, who has been engaged in the grain, feed and flour business at Cornwall, Ont., has closed his flour mill but will continue in the feed and grain business.

The Canadian Pacific Railroad contemplates the erection of large elevators at Port Moody, B. C., and it is said to be making preparations for the handling of 50,000,000 bushels of wheat.

The Grain Growers' British Columbia Agency has decided to erect a mill and elevator at New Westminster, B. C. The elevator will have a storage

capacity of 25,000 bushels and will be 50x35 feet in size and 80 feet high.

The Western Canada Milling Company, Ltd., has purchased the James Elevator at Boissevain, Man., and it is reported that it will be dismantled and the material used for the erection of an elevator on the Boissevain-Lauder extension of the C. P. R.

The Canadian Pacific Railroad is building an elevator at St. John, N. B., and application has been made to the commissioners of the city for a permit to run a grain conveyor from the new house to the older elevator across the street. The commissioners are withholding action on the request until the Dominion Government replies concerning the elevator site which was granted to the railroad company by the Government and since then the question has been raised regarding its effect on the approach to the 400-foot strip which was reserved to give common access to the Government wharves.

The Quebec Harbor Commissioners are about to award the contract for the erection of the 2,000,000-bushel elevator at Quebec, which has been under consideration for some time. It will be located on the Louise embankment and it is said that a floating elevator with a capacity of 150,000 bushels may also be constructed as an adjunct to the elevator proper.

EASTERN

W. S. Leavitt has opened a new grain store at North Conway, N. H.

E. W. Bragman has purchased the grain and feed business of W. O. Gilbert at Pittsfield, Mass.

The Wilson Land and Grain Company will build a warehouse at Arcadia (R. F. D. from Upperco), Maryland.

The Palmer Coal and Grain Company at Palmer, Mass., has been sold to the Cutler Company of North Wilbraham, Mass.

C. H. Nolt and Leroy H. Nolt of Lancaster, Pa., have purchased the grain, feed, lumber and coal business of Ezra Miller at Landisville, Pa.

Michael A. Casey and George N. Eveleth have taken over the grain, flour and hardware business of the J. L. Frost Company at Auburn, Maine.

The grain business at Lewiston, Me., formerly operated by J. L. Frost and Fred E. Grey, has been purchased by George Eveleth and M. A. Casey.

The Directors of the Port of Boston are preparing plans for the erection of a 500,000-bushel elevator near Commonwealth pier, No. 5, in Boston, Mass.

The K. & L. Grain Company of Panama, composed of German and Spanish capitalists, has leased a store and offices at Jamaica, N. Y., which will be made a distributing point for the company.

The Harry G. Gere Company has been incorporated at Hackensack, N. Y., with a capital stock of \$50,000, to deal in grains. The incorporators are Harry G. Gere, John W. Bellis and Arthur T. Smith.

The Delaware Manufacturing Company has been incorporated in Paterson, N. J., to deal in grains. The capitalization is \$25,000, and the incorporators are Edmund and Fannie M. Whittaker and Harry S. Day.

The Sterilized Grain Company has been incorporated at Camden, N. J., with a capital stock of \$125,000. The incorporators are Walter Wiedmaier, Charles Barth, Eugene Bender, Albert Ottenbacher and Peter Turnus.

The Lewis Grain Company has been incorporated at Buffalo, N. Y., with a capital stock of \$10,000. The incorporators are Metta M. Lewis of Buffalo, William S. Harrison of Angola, N. Y., and John G. Burns of Buffalo.

OHIO, INDIANA AND MICHIGAN

The Saginaw Grain Company at Saginaw, Mich., has increased its capital stock to \$30,000.

Chas. A. Davis has purchased an interest in the elevator and coal business at Eden, Mich.

The Laingsburg Elevator Company of Laingsburg, Mich., has installed an electric light plant.

It is reported that Chas. Elliott is contemplating the erection of an elevator at Jackson Center, Ohio.

F. C. Bassett and Elwood Aldrich have engaged in the grain, feed and flour business at Adrian, Mich.

The Ithaca Farmers' and Gleaners' Elevator Company, Ithaca, Mich., has increased its capital stock to \$50,000.

The Lavengood Grain Company at Amboy, Ind., is now conducting its business under the name of the Amboy Grain Company.

Hufnaugle & Miller have sold their elevators at Redkey and at Powers, Ind., to Aukerman & Cook, who will take possession about March 1.

Baldwin & Dirk, grain and stock dealers at Weston, Ohio, have divided the two branches of their business, Mr. Dirk taking the grain trade.

The Farmers' Elevator Company of South Whitley, Ind., held its annual meeting on December 31 and it was decided to increase the capital stock to \$15,000 and to build an addition to the elevator

in the way of a warehouse, and in addition to grain buying, sell coal, salt and fence posts.

The Hart Grain Company of Detroit, Mich., has been dissolved and W. H. Hart, former head of the establishment, has engaged in the grocery business.

Maurice O. Lees of Hoopeston, Ill., has sold his elevator near Terre Haute, Ind., to William Wrightsman of East Lynn, Ill., the consideration having been \$1,400.

The King Grain Company has been incorporated at Wabash, Ind., with a capital stock of \$10,000. The directors are Allen W. King, Jr., Fred I. King and Muriel King.

The Mollett Grain Company has been incorporated at Frankfort, Ind., with a capital stock of \$15,000. The incorporators are W. B. Kramer, Jr., William Wiedemann and William Frank.

Rhinehart Smith of the Huntley Manufacturing Company, Silver Creek, N. Y., has secured an order from Andrew Ringlein, Leipsic, Ohio, for a No. 6 Monitor Cleaner to be used in his elevator.

Joseph McConnell of Oxford, Ind., who recently sold his elevator at Atkinson, Ind., to Pagett & Shackleton, has purchased the elevator of the Swanton Grain Company at Swanton, Ind.

J. A. Heath, of the Richmond Elevator Company, Richmond, Mich., has been negotiating with the Business Men's Association of Port Huron, Mich., relative to the establishment of a branch house.

The Toledo Grain & Milling Company, Toledo, Ohio, has installed a dust collector in its new elevator. The equipment was secured of the Prinz & Rau Manufacturing Company, of Milwaukee, Wis.

F. A. Finch recently purchased the Clover Leaf Elevator at Clarkshill, Ind., and later sold the property to J. W. Witt of Lebanon, Ind., and Ura Seegar of Clarkshill. The latter will have active charge of the plant.

The Farmers' Grain and Milling Company of Sidney, Ohio, has installed a No. 4 Monitor Wheat Cleaner purchased of Rhinehart Smith, representative of the Huntley Manufacturing Company, Silver Creek, N. Y.

The Kentland Elevator Company has been incorporated at Kentland, Ind., with a capital stock of \$12,000. The directors are Barney F. O'Neil, Meddie Segs, Sr., Alva O. Montgomery, Albert J. Thompson, and Uriah Unger.

The farmers of Gratiot County, Mich., have taken steps for the organization of a co-operative bean elevator company and it is anticipated that a house will be erected at Alma during the spring. J. L. Miller has been promoting the new project.

The J. L. Rouze Company and the Farmers' Commercial Grain and Seed Company have consolidated at Risingsun, Ohio, and the business of the two elevator companies will be continued under the name of the Farmers' Grain and Seed Company.

The Drone Elevator at Zanesville, Ohio, belonging to the estate of the late John T. Drone, has been purchased by F. B. Armstrong, J. V. Ball and James H. Lee, who compose the firm of Armstrong, Lee & Co., flour dealers. The consideration was \$5,000.

A company of farmers is being organized at Ionia, Mich., which will be capitalized at about \$10,000, and it is said that elevators will be built at Ionia and at Muir, Mich. W. W. Bemis, George Aldrich, Eugene Vohlers, James N. Chase and L. G. Linman are interested in the proposition.

Patrick J. Shouvin of Springfield, Ohio, has purchased the interests of Thomas Dewine and W. R. Hardman in the elevator of the John Dewine Company at Yellow Springs, Ohio, and Mr. Shouvin and John Dewine are now the sole owners. The latter will continue as manager of the plant.

Charles Rockwell & Co. of Mount Vernon, N. Y., will build an elevator at Toledo, Ohio, in conjunction with their hay warehouse. The house will have a handling capacity of 15,000 bushels daily and will cost approximately \$15,000. The elevator will be 70 feet high and will be of frame construction covered with corrugated iron. Machinery for cleaning and grinding will be installed.

MISSOURI, KANSAS AND NEBRASKA

J. S. Magee will open a grain and hay business at Bloomfield, Mo.

F. H. Hoerman has purchased an elevator at Linn, Kan., from H. R. Gray.

Frank Pixley has sold his feed store at Minneapolis, Kan., to Fred Johnson.

S. A. Hutchinson has practically completed his elevator at Burlington, Kan.

The Farmers' Elevator Company has completed a new elevator at Helvey, Neb.

The Halliday Elevator Company of Cairo, Ill., has opened an office in St. Louis, Mo.

The Cochrane Elevator at Hubbell, Neb., has been purchased by the Gooch Milling Company.

The Pickrell Farmers' Elevator Company of Pickrell, Neb., will engage in the coal, lumber, live

stock and implement business in connection with its grain business.

A farmers' stock company may be formed at Blue Rapids, Kan., to engage in the grain business.

The Farmers' Elevator Company at Cullison, Kan., will be reorganized under a new charter.

Robert T. Ray has removed the offices of the Ray Grain Company from Herrington to Wichita, Kan.

William Falkner has gone into partnership with Chas. A. Geiger in the elevator business at Belyue, Kan.

The Kimball Lumber and Supply Company, Kimball, Neb., has completed the construction of an elevator.

W. Williams has repurchased the Santa Fe Elevator at Harper, Kan., which he sold to Rex Nordyke last summer.

J. G. Goodwin has sold his interest in the grain and seed business at Marshall, Mo., to his son, J. Keith Goodwin.

The elevator at Kiro, Kan., owned by Forbes Bros. of Topeka, Kan., has been sold to the Kiro Mercantile Company.

The Farmers' Elevator Company has taken over the holdings of the Trans-Mississippi Grain Company at Spencer, Neb.

The Leach Bros. Grain Company has disposed of its elevators at Salisbury, Keytesville and Clifton Hill, Mo., to the T. E. Leach Grain Company.

The Pawnee County Grain and Supply Company of Larned, Kan., will increase the capacity of its elevator by the construction of an addition, 24x34 feet in size and 30 feet high.

At the tenth annual meeting of the Odell Farmers' Elevator Company at Odell, Neb., a dividend of 10 per cent was declared and officers were elected as follows: T. W. Stanosheck, president; Frank Burns, vice-president; J. H. Young, secretary, and Ernst Loemker, treasurer.

Plans are under way for the construction of a new elevator plant by the Ismert-Hinke Milling Company, Kansas City, Mo. It will have a capacity of 250,000 bushels and will consist of six 27-foot concrete tanks, two of which will be subdivided. Interspace bins will also be constructed.

A co-operative elevator company has been organized at Schuyler, Neb., by 120 farmers and the directors are Frank Krejci, Joseph Mares, J. H. Costello, William Schoultz and Joseph Jonan. An elevator will be erected immediately.

WESTERN

The elevator at Twin Bridges, Mont., has received a government contract for 1,000,000 pounds of oats.

Edson & Edson of Redlands, Cal., have sold their grain and feed store to the Main Hay and Grain Company.

The Peck Farmers' Union of Peck, Idaho, recently purchased 75,000 grain bags of the Albers' Bros. Milling Company.

H. C. Fisher has taken over the grain and feed business at Lordsburg, Cal., formerly owned by Nelson & Hannawalt.

Farmers in the vicinity of Plaza, Wash., are planning to build an elevator for handling their crops the coming season.

The Nez Perce-Rochdale Company of Nez Perce, Idaho, has decided to install equipment for the handling of grain in the bulk.

The Hemet Grain Company, capitalized at \$25,000, will succeed Rather Bros. at Hemet, Cal., and W. S. Rather will manage the business.

N. J. Lindgren and John Larson have formed a partnership at Poplar, Mont., and will engage in the hardware, grain and banking business.

Nelson Ashmore, manager of the Columbia Grain Company at Waterville, Wash., recently shipped 10,000 bushels of wheat to East St. Louis, Ill.

The Lytle Elevator Company has been incorporated at Miles City, Mont., with a capital stock of \$50,000. D. L. Lytle is president and F. G. Lytle is secretary.

The Ontario Commission Company, a branch of the Interior Warehouse and Grain Company of Vale, Ore., will build a grain warehouse at Ontario, Ore.

The Raymond Hay and Produce Company has been organized at Raymond, Wash., by Metcalf, Snroder & Albert, and they have opened a grain and feed store.

R. W. Soule of the Western Elevator Company of Lewistown, Mont., has been making arrangements to build an elevator at Kendall, Mont. An elevator company of Billings, Mont., also contemplates the erection of a house at Kendall.

The Globe Milling Company has practically completed its elevator at San Pedro, Cal., and work is progressing on its house at San Francisco. The former is 90 feet high and will have a capacity of

125,000 bushels. The company recently purchased the steamer Portland which has a carrying capacity of about 97,000 bushels of wheat.

The Parent Seven Grain Food Company of Los Angeles, Cal., has increased its capital stock to \$200,000.

J. F. Garrette has disposed of his interest in the grain firm of Garrette & Thomas at Woodland, Cal., to his partners, C. F. Thomas, Fred Mattei and W. C. Stephens.

C. W. Morgariedge of Sheridan, Wyo., has been investigating Worland, Wyo., in the interest of the Denio Milling Company, with a view to building an elevator at Worland.

It is reported that an elevator will be built at Buffalo, Mont., and that the Farmers' Elevator Company now operating houses at Straw and Moore, Mont., is promoting the enterprise.

At a recent meeting the Davenport Grain Company, Davenport, Wash., elected J. J. Nichols, president; A. J. Field, secretary; J. W. Sawyer, treasurer, and W. O. Mansfield, manager.

The Farmers' Distributing Company has been organized at Toppenish, Wash., to deal in grain, hay and vegetables. The board of trustees consists of R. M. Johnson and W. B. Meyers of Wapato, Wash.; Theodore Milner, W. P. DeRemer and George T. Hyatt of Toppenish, Wash.; B. D. Sloop and P. L. Medaris of Parker, Wash.

SOUTHERN AND SOUTHWESTERN

The new elevator at Floydada, Texas, has been completed.

W. C. Cooper & Co. have organized at Henderson, Ky., to deal in grain.

F. A. Merrell has purchased the grain business of Long & Clark at Jasper, Ala.

W. T. Armstrong has completed the construction of a grain warehouse at Mission, Texas.

The Pioneer Mill and Elevator Company of Albany, Texas, has surrendered its charter.

The Canyon Coal and Elevator Company, Canyon, Texas, has filed a certificate of dissolution.

The New Orleans Terminal Company will operate its elevator at Port Chalmette, La., this winter.

The J. Allen Smith Company will erect another elevator at Knoxville, Tenn., at a cost of about \$4,000.

The Union Terminal Company of Jacksonville, Fla., will erect a three-story reinforced concrete warehouse.

It is reported that an elevator and flour mill will be built at Bartlesville, Okla., by the farmers in that vicinity.

A new warehouse, 30x40 feet in size, has been completed at Bay City, Texas, by the Bay City Grain Company.

The Morse Feed and Warehouse Company has been incorporated at Crowley, La., with a capital stock of \$10,000.

The Bell Grain Company has opened a grain, feed and seed store at Bay City, Texas, and C. C. Vandiver is in charge.

The Farmers' Grain and Supply Company, recently incorporated at Gage, Okla., will build a 20,000-bushel elevator.

The W. C. Sanders Mill and Elevator Company has purchased the Arapaho Mill and Elevator Company at Arapaho, Okla.

The Farmers' Grain and Supply Company of Gage, Okla., has purchased the plant of the C. B. Cozart Grain Company.

The Woods County Grain and Broomcorn Company has purchased a site at Alva, Okla., on which it will build an elevator.

The Empire Grain Company of Fort Worth, Texas, has changed the style of its name to the Stowers Grain Company.

E. C. Miller and H. R. Miller of Anadarko, Okla., have opened an office for the Southwestern Grain Company at Roswell, N. M.

A. W. Hodnett has severed his connection with the Duncan-Hodnett Grain Company at Atlanta, Ga., and has engaged in the feed and grain business under his own name.

The Cox-Henry Grain Company has been incorporated at Carmen, Okla., with a capital stock of \$10,000. The incorporators are Charles H. Cox, John Henry and J. B. Macy.

Maj. J. Bright Horton sold to the West Tennessee Grain Company at Memphis, Tenn., two warehouses on the Illinois Central Railroad, and the company sold to Maj. Horton its elevator and warehouse on the Frisco Railroad.

Owen & Jennings and the T. A. Jennings Company have consolidated at Lynchburg, Va., under the firm name of Jennings, Owen & Jennings, with a capital stock of \$75,000, to engage in a general brokerage business. The company will take over the warehouse and elevator formerly occupied by the T. A. Jennings Company. The elevator has a

capacity of 25,000 bushels and the warehouse has a storage capacity of 150 cars of feed and hay.

The Farmers' Warehouse Company has been incorporated at Henderson, Texas, with a capital stock of \$2,000. The incorporators are R. E. Hutson, I. P. Windle and R. M. Richardson.

The Taylor Grain and Elevator Company has been incorporated at Corpus Christi, Texas, with a capital stock of \$30,000. The incorporators are J. B. Thompson, W. W. Jones and C. M. Taylor.

The Farmers' Union Warehouse Company of Huntsville, Texas, will rebuild its warehouse, which was burned recently. It will be 100x125 feet in size, covered with galvanized iron, and will cost \$3,500.

The Kentucky Public Elevator Company has awarded a contract to the Witherspoon-Englar Company of Chicago for the erection of a five-story concrete oats bleacher at Louisville, Ky., to cost \$6,000.

J. M. Smith & Co. of Gadsden, Ala., have awarded the contract for the erection of a warehouse 75x100 feet in size, to be used for storing grain, flour and feed. The building will be of corrugated iron with a cement floor.

E. Lee Heidenreich & Co., Kansas City, Mo., have plans and specifications for a concrete elevator for J. M. Shornden, Ponca City, Okla., and the contract includes an automatic scale, corn sheller, four-roll mill and regular transmission machinery.

A. B. Crouch has purchased the interest of his partner, I. A. Mabry, in the Crouch-Mabry Grain Company at Temple, Texas, and will continue business under the name of the A. B. Crouch Grain Company. Mr. Mabry will be associated with E. R. & D. C. Kolp at Fort Worth, Texas.

J. H. Rutherford, formerly engaged in the wholesale grain business at Shreveport, La., but who has been in that business in Kansas City, Mo., for the past five years, has announced that he will return to Shreveport to engage in the grain trade. He will build a mill and elevator, machinery for which has been shipped.

The Blue Grass Commission Company of Lexington, Ky., has awarded a contract to the Burrell Engineering and Construction Company of Chicago, for the erection of a steel-clad elevator to be operated by electricity. The house will be 73 feet in height and, with the present facilities, will have a storage capacity of 60,000 bushels.

MINNESOTA AND WISCONSIN

A farmers' elevator company is being organized at Oslo, Minn.

A farmers' elevator company is being organized at Hazel, Minn.

The Commander Elevator has completed a new house at Randolph, Minn.

The farmers around Amiret, Minn., are contemplating the erection of an elevator.

Harry Keye & Co. have leased the Minneapolis & Northern Elevator at Argyle, Minn.

A farmers' co-operative elevator company may be organized at LeSueur Center, Minn.

The farmers in the vicinity of Grandview, Wis., plan the erection of a grain warehouse.

F. C. Ward has bought George Hoag's interest in the Knowlton Grain Company at Waukesha, Wis.

The farmers in the vicinity of Red Lake Falls, Minn., will probably organize and build an elevator.

The Chicago & North-Western Railroad has leased its new elevator at Milwaukee, Wis., to the Rialto Elevator Company.

The Underwood Grain Association of Underwood, Minn., will receive bids for the erection of an elevator until March 1, 1913. N. P. Pederson is secretary.

The Kaukauna Farmers' Elevator and Produce Company at Kaukauna, Wis., has completed a new building, 25x100 feet in size, and an elevator will be constructed later.

August Froemming has sold his interests in the Froemming-Perry Elevator Company at Maplewood, Wis., to Edward Perry, and the Perry Grain Company will continue the business.

Smith & Bowers, grain and feed dealers at Fennimore, Wis., have dissolved. James Bowers has retired and J. R. Parnell will be associated with Mr. Smith in the continuance of the business.

THE DAKOTAS

An elevator has been completed at Brownsville, S. D.

George Krueger will erect a 3,000-bushel elevator at Ryder, N. D.

Fred J. Maly, Wilmet, S. D., will remodel his elevator this spring.

Frank Pettyjohn has purchased Henry Hoff's elevator at Harrold, S. D.

G. E. Burgess and Leo Hart have built an elevator at Medora, N. D., which measures 12x20 feet

and is fitted with a portable elevator and gasoline engine.

The Great Western Elevator at Blanchard, N. D., has been closed for the season.

The Dakota Grain Company has an elevator under construction at Norton, N. D.

An elevator has been erected at Wellsburg (R. F. D. from Harvey), N. D., and Jacob Heil is the buyer.

The Farmers' Elevator Company has awarded the contract for the erection of an elevator at Bismarck, N. D.

Franz Bayer, Math. Bayer and John Loh have purchased Julius Hollst's elevator and lumber yard at Gladstone, N. D.

A committee has been named at Almont, N. D., to consider the organization of a company of farmers to build an elevator.

The New Farmers' Elevator at Fullerville (R. F. D. from Gayville), S. D., has been completed, and Thomas Inch is president of the company and Jesse West is treasurer.

The German Grain Company has been incorporated at Sioux Falls, S. D., with a capital stock of \$50,000. The incorporators are W. J. Buttschau, Abe Rothschild and Klara Hanson.

Michael Burgard and Ludwig Fettig, who have been engaged in the elevator and implement business at Selz, N. D., have dissolved partnership and Mr. Burgard will continue the business.

The Farmers' Grain Company has been incorporated at Dell Rapids, S. D., with a capital stock of \$20,000, by L. E. Marshall, Hans Loverbee, Ole B. Landstad, Henry Smith and C. H. Crumb.

The Farmers' Co-operative Grain Company has been incorporated at Badger, S. D., with P. R. Crothers, Lewis Norgaard, Chris Nielsen, J. H. Quinn, John Weiderkopf as incorporators. The company has purchased D. McKinnon's elevator.

[Special Correspondence.]

TOLEDO GRAIN NEWS

BY E. F. BAKER.

The situation in Toledo is about normal for this season of the year. There is very little shipping being done and a fair volume of grain coming into the local market. Fully 90 per cent of the corn now making an appearance in the Toledo market, according to Chief Grain Inspector Culver, is grading No. 3, which is the contract grade for this market. There is plenty of wheat on hand to take care of the milling requirements and local mills are running at a little more than half capacity. The demand for mill feed is very light, owing largely to the extremely mild weather. The reports from the growing crops are good and so far as can now be predicted next season should be a splendid one. Many of the farmers have their plowing done and consequently the corn planting will be done early. The traffic situation is easier than it has been for a long time past and there is little complaint of a scarcity of cars. During the past seven days receipts on the local market were: wheat, 36,000 bushels; corn, 115,200 bushels; oats, 108,800 bushels. The market closed on February 11th, with cash wheat \$1.11½; cash corn, 52 cents, and cash oats at 36 cents. Wheat and oats are a trifle above the Chicago market while corn is a little below.

F. W. Jaeger of J. F. Zahm & Co., with his wife, is spending a month in sunny California.

General Manager White of Ziegler & Co. of Bucyrus, O., was a visitor at 'Change recently. Mr. White reports a good demand for winter wheat flour of which his concern has plenty at the quoted prices of \$5.20 and \$6.00.

The Buckeye Millers' Association at a meeting at Marion, O., in January, elected the following officers: President, Frank W. Bacon of Tiffin, O.; vice-president H. W. Fish of Mansfield, O.; secretary, John F. Ash of Forest, O.; treasurer, S. S. Heabler; directors, John D. Owens, Marion, O.; D. H. White, Bucyrus, O.; K. E. Mitchell, Dunkirk, O.; W. J. Ocha, Kenton, O.

Three dollars was all that burglars who entered the building through a window in the engineer's department of the Spencer & Furrow Grain Co., at Piqua, O., found in the cash drawer.

A. P. Sandles, in a recent speech before the Union County Farmers' Institute at Marysville, O., made a stirring appeal to the boys to "stick to the farm." Mr. Sandles believes firmly in the farm as the great place for boys who have the proper training to make a success of agricultural life and he is just as firm a believer in the farm for the girls. "You can't keep the boys on the farm without the girls," said he. Mr. Sandles has given much thought to the subject of keeping the girls on the farm instead of joining the army that is rushing pell-mell to the great white ways of the cities. This season a free trip to Washington will be arranged for girls as well as boys in conjunction with the corn growing contest. The girls' contest will be on flower and crop raising. Toledo has been planning a corn show and it was

intended to give the show on Valentine day. It was hoped to have Bert Ball of Chicago, chairman of the bureau of crop improvement and committeeman of the National Council of Grain Exchanges, as the principal speaker. Owing to Mr. Ball's trip through the southwest it was impossible to secure his services for that date so the corn show has been postponed until a later date which has not yet been set.

Toledo is to have a new \$15,000 grain elevator with a handling capacity of 15,000 bushels per day. The new elevator is to be erected by Charles Rockwell & Co., of Mount Vernon, N. Y., in conjunction with their hay warehouse at Front and Treadwell streets, formerly conducted by F. W. Lipe. The Webster Mfg. Co., of Tiffin, O., has secured the contract for the erection of the grain transfer house and the building will be ready for occupancy May 1. The elevator will be 70 feet high, and will be of frame construction covered with corrugated iron. Machinery for cleaning and grinding will be installed.

The elevator and flour mill, with machinery and 20,000 bushels of grain of J. H. Vocke & Son, at Napoleon, O., was recently entirely destroyed by fire, causing a \$50,000 loss, which was partly covered by insurance. The fire originated on the top floor and sparks threatened the entire district between the mill and the Titgen brewery. Firemen were on duty five hours before danger was passed. The elevator and mill will be rebuilt, the company in the meantime continuing business at its mill on Front street.

The Corn Growers Boosters' Association will give a banquet at Van Wert, Ohio, Friday evening at the Home Guard Temple. Among the speakers will be Governor Cox, Secretary of Agriculture Sandles, and Auditor of State Donahey.

The members of the exchange who will form the five man team which will roll at the A. B. C. tournament this month are George Rudd, H. R. DeVore, H. W. Applegate, George Beeley and Richard Sheldon. The team played a picked five at the Collonade this week and "walloped" them in three straight games.

President Paddock of the Produce Exchange has sent in a protest against the passage of the McCumber bill. Senator Sherwood has informed local grain men that the bill will not come up for some time. Local grain men are bitterly opposed to the measure and will take all possible steps to prevent its passage.

The Tri-State meeting of the Grain Dealers' Association will be held in Toledo, February 21st, at the Boody House. Some important matters will be up for discussion.

The Herrick scheme of financing farm loans was endorsed at the recent meeting of the annual farmers' institute held at Mt. Blanchard, Ohio.

The rate "discrimination by railroads" charges brought by the Toledo Produce Exchange will be up for a hearing before the inter-state commerce commission at the Federal Building in Toledo, February 20. Jean Paul Mueller of Washington, attorney for the local grain men throughout their long fight against the alleged unjust rating by the railroads, will be in the city, go over all the testimony in the case and prepare it for formal presentation at the hearing.

The eleventh annual meeting of the Fostoria Farmers' Institute Association recently held at Fostoria, O., announced A. P. Sandles, secretary of the Ohio Agricultural board, "Ohio's most useful citizen," and protested against his transfer to the cabinet on the grounds that "Ohio cannot afford to lose him."

Chairman C. P. Gothlin of the Ohio Public Service Commission appeared recently before the members of the Chamber of Commerce of Dayton, Ohio, at the Y. M. C. A., in that city and made a strong talk on the "necessity for shippers getting together to serve common purposes and work with the carriers in securing equitable shipping facilities as well as to oppose abuses and discriminatory elements." Mr. Gothlin declared that close organization is needed, stating that it is unfair for the individual shipper to be compelled to bear the brunt of the battle with railroads since such controversies are not personal but involve a principle.

Col. Sheldon C. Reynolds, prominent Toledo grain man who died recently, left an estate valued at half a million dollars in addition to real estate on which no valuation was placed by the appraisers. It was recommended that the widow receive an annual allowance of \$15,000.

Western Canada announces that there is no fear of a grain blockade for the winter of 1913, mainly because the price of wheat is so low that farmers are holding their grain. In addition all railroads have emergency rates ready for shipping grain via the southern outlet. At the present time, however, there is room in the terminal elevators at the head of the lakes and indications are that transportation companies will not be compelled generally to use a rate southward for grain in bond.

ASSOCIATIONS

ST. LOUIS GRAIN CLUB

Some six years ago a conception that had been slowly maturing in the mind of a young man in old St. Louis of the need of the grain trade for an ethical organization was diffidently submitted to his associates.

The inspiration was regarded as impracticable for a time because of the old inter-market competitive methods of taking advantage of every edge in grades, terms and technicalities, but the idea took root, grew steadily and finally blossomed into a resolution to undertake a new work, insofar as St. Louis was concerned—that of broadening the sphere of its grain commerce and the placing of it on a higher ethical plane.

The little association, or club, formed then did such good work and appealed so strongly to the inherent desire of fair-minded men for a square deal and uniform trade customs, that it soon attracted and bound into one compact body practically every man of executive influence in the St. Louis grain trade.

Representatives of other markets visiting St. Louis were quick to notice the change, and soon inquiries came from other Boards of Trade—what was this club like, and what was it trying to do? The spirit was crisp and inspiring and spread rapidly, finally culminating in a great meeting in Chicago of delegates from all the Grain Exchanges and the organization of the Council of Grain Exchanges—an association of national scope, whose purpose is the uniformity of trade rules and customs, the elimination of the undesirable, and the conservation of legitimate grain commerce—a broad and beneficent educational movement for greater soil fertility and larger crops, and that the purer idea's of today shall become the universal methods of the future.

The St. Louis Grain Club is primarily a working committee of the whole, and its sessions, shown by a little pamphlet just published by Secretary Mar-

house. It was written by J. Elmore Lucy. Roy Carter followed with jokes that hit home.

There were 17 members in the minstrel troupe. They were John L. Messmore, Roy Carter, John Hawkins, George Ichertz, Edward Daley, C. L. Wright, Peter Payne, Bob Morrison, Horace Milliken, Gus Veninger, Wilbur Christian, George Harsh, Roger Annan, Jr., Denny Parrot, Claude Morton.



SECRETARY THOMAS K. MARTIN

Herman Rump and Bogier Taylor. All made up in excellent style.

The entertainment followed the dinner and election of officers. George F. Powell, one of the younger generation, yet old in the grain trade, was elected president, and George C. Martin, Jr., vice-president. (Everybody knows the two Georges.) The directors for the ensuing year are J. W. Edwards, J. L. Wright, B. S. Lang, M. J. Mullally and George Harsh.

One of the pleasantest features was the re-election of Thos. K. Martin, the secretary of the association since its inception, and the presentation to him by the retiring administration of a solid silver service.

The work of Mr. Martin was characterized as a labor of love—without recompense and above price—a wise, forceful influence working quietly, yet unceasingly—harmonizing—suggesting—inspiring—the struggle of genius to uplift, the altruistic gift of a keen and kindly intelligence.

RESOLUTIONS OF ILLINOIS GRAIN DEALERS

The directors of the Illinois Grain Dealers' Association during the past month adopted resolutions favoring Cary Time Filing Bill and also in support of Willis L. Moore for Secretary of Agriculture. The resolutions in full are as follows:

Resolved, That the bill known as the Cary Time Filing Bill, (H. R. 3010), introduced in the House of Representatives, April 10, 1910.

"To prevent discrimination by the mailing or otherwise forwarding, except by telegraph or telephone, of telegrams or messages by telegraph companies when same are accepted for telegraphic transmission by wire.

It is in the interest of every person who uses the telegraph system, and we hereby respectfully request the Senator and Representatives in Congress from Illinois, to use all honorable means to secure the passage of the said bill.

Whereas, The great importance of the grain interests of the country and the fact that its benefit reaches and influences every individual in the Nation, it is of paramount importance that the agricultural interests of the country should be conserved



PRESIDENT GEORGE F. POWELL

tin, entitled the "Legislative Resolutions of 1912," are usually devoted to the earnest consideration of the live problems of the accumulation and distribution of the world's food supplies.

Terminal expense, freight rates, weighing systems, grading methods, customs and practices of the trade are all scanned closely and that which is not wise or wholesome is eliminated promptly and effectively.

The annual meeting of the association is limited to fun and the election of officers. This took place on the 30th of January, and the minstrels, composed entirely of club talent, grilled mercilessly in song and jest the faults and foibles of the prominent members.

Claude Morton, in a negro feminine role, made a hit with his song, "Let Him Alone." In the verse, incidents of daily trading were "taken off." George Harsh, who weighs in the vicinity of 200 pounds, as "Baby Doll," in his short skirts, sang a solo. Herman Rump, as Simple Simon, cleverly read an essay on an "Automobile" that brought down the

by those who have the greatest ability and who are best informed upon the subject, and

Whereas, The Board of Directors, of the Illinois Grain Dealers' Association, realizing the importance of the grain trade as set forth above, and representing grain shippers in the State of Illinois, who operate 1,100 country elevators, and

Whereas, We are informed that Professor Willis L. Moore, of Washington, D. C., is proposed for the appointment as Secretary of Agriculture for the United States, now therefore, be it

Resolved, That we, the Board of Directors, of the Illinois Grain Dealers' Association, hereby respectfully represent to President-elect Woodrow Wilson, that we believe that Professor Willis L. Moore, of Washington, D. C., is well equipped and fitted to efficiently discharge the duties of Secretary of Agriculture, and be it further

Resolved, That we respectfully request and urge the appointment of said Willis L. Moore to the position of Secretary of Agriculture of the United States.

GRAIN SOLICITORS' NATIONAL ASSOCIATION

An association was formed at Minneapolis, Minn., January 30 which will be known as the Grain Solicitors National Association, and will comprise in its membership traveling representatives of grain firms in all sections of the country. The objects of the new organization are along educational and social lines and as there are upwards of one hundred and forty-six traveling grain men in Minneapolis alone it is expected that the association will grow to large proportions as soon as its scope and advantages become known. The organization starts with forty-six members.

The following are the officers elected to serve for the year: President, Frank Kelly, with John McLeod & Co., Minneapolis; first vice-president, Jas.

King Milling Co., Pittsfield, Ill.; Samuel Mangas, (Elkhart), Lincoln, Ill.; A. E. Stanley Mfg. Co., Decatur, Ill.

The meeting of the Tri-State Grain Producers' and Dealers' Association which was scheduled to be held in Toledo on February 14, has been postponed until February 21. Some big men have been secured as speakers for this meeting and a large attendance and interesting time is anticipated.

Secretary S. W. Strong reports the following changes in the Illinois Grain Dealers' Directory during the past month: Roanoke, Daniel Greuter succeeds D. C. Balsley; Atlanta, Farmers' Grain Co., no such firm there, error; Elkhart, Beggs & Lynd succeed Central Grain Co.; Altoona, Jackson Grain Co., out of business; Oquawka, A. M. Thornton succeeds Lemaire & Thornton; Peoria, The A. D. Campbell Hay Co. succeeds A. D. Campbell; Bardolph, V. E. Kepple succeeds G. W. Cole; Roseville, Farmers' Elevator Co., no such firm there, error; Swan Creek, C. L. Grimsley succeeds Grimsley & Simmons; Larchland, F. H. Curtis succeeds Curtis Bros.; Orion, F. O. Swanson & Co. succeeds F. L. Hough; Mt. Carmel, Dorney, Storckman & Co., succeed Dorney & Storckman; Patton, Dorney, Storckman & Co., succeed Dorney & Storckman; Egan, Wingert & Clevidence succeed Marshal Bros.; Itasca, Itasca Lumber & Feed Co. succeed Otto A. Franzen; Malta, A. D. Stanford succeeds W. D. Blair; Shabbona, R. C. Flewellin & Son, succeed Flewellin Bros.; Atwood, Horton Bros. succeed Atwood Grain Co.; Hunt, A. M. Rutherfordman succeeds Rutherfordman & Ervin; Borton, Henn & Bebbis succeed Chas. Henn; Pesotum, Davis & Gilles succeed Kleiss & Gilles; Moweaqua, Andrews & Adams succeed Adams Grain Co.; Colfax, J. R. Williams & Son succeed J. R. Williams; Mulkeytown, Mulkeytown Mill Co. succeed Lebster & Harrison; Murphysboro, Southern Illinois

Mill & Elevator Co. succeed Pinckneyville Milling Co.; McNabb, Surface & Packingham succeed H. E. Surface; New Lenox, H. M. Dickinson succeeds C. J. Meyer; Oakland, Henn & Beggs, new firm; Donnellson, Donnellson Elevator Co. succeed Dunn & Young; Weston, Graves & Hurburgh succeed Shearer Grain Co.; Brisbane, H. N. Dickinson succeeds C. J. Meyer; Homer, J. H. Current & Son succeed J. M. Current; Frankfort, G. L. Ulrich succeeds C. J. Meyer.

During the past month the following new members have been added to the Indiana Grain Dealers' Association: SHIPPERS—The Leesburg Grain & Milling Co., Leesburg; McDonald & Co., New Albany; Culver City Grain & Coal Co., Culver; D. M. Light, Keystone; Catron Bros., Flora; Fairland Grain Co., Fairland; Hershman & Son, Tipton. RECEIVERS—The Fitzgerald Bros. Co., Cincinnati, Ohio; F. H. Farnsworth, Kokomo, Ind.; The Cincinnati Grain Co., Cincinnati; Dutchess & Staggs, Kokomo, Ind.

The sub-committee, representing the Central Grain Association, appointed at St. Louis, January 13, in opposition to the proposed advance of 1c per cwt. on grain from Illinois to all points, appeared before the State Railroad and Warehouse Commission, at Springfield, the 20th instant, and petitioned the Commission, in the name of the Illinois Grain Dealers' Association, to cite the carriers to show why such an advance of rates was proposed. Those present were S. W. Strong, Secretary of the Illinois Grain Dealers' Association, Chairman; W. T. Cornelison, Peoria; Chas. S. Rippin, Manager of the Rate Department of the Merchants Exchange, St. Louis, and J. A. McCreery and F. C. Walbaum of the Farmers' Grain Association. Chairman Berry stated that the matter would be gone into immediately, and that if a hearing was ordered all interested would be given notice.

COURT DECISIONS

[Prepared especially for the "American Grain Trade," by J. L. Rosenberger, LL. B., of the Chicago Bar.]

Requirements For Resale of Refused Grain

Where there was a contract for five cars of oats of 1,000 bushels each, the Court of Appeals of Georgia holds (*Sims-McKenzie Grain Co. vs. G. E. Patterson & Co.*, 73 Southeastern Reporter, 1080) that it was a substantial compliance therewith to ship the oats in four cars of 1,250 bushels each. But the purchaser, which accepted one car and rejected the others, was not chargeable with demurrage, nor with brokerage charges resulting from a resale of the oats. Then, there being no allegation as to what was the market value of the oats at the time and place of delivery, and no averment that notice had been given the purchaser, as the civil code of Georgia requires, the petition in the seller's action for damages was subject to the demurrer filed thereto, and should have been dismissed. In other words, the court holds, in general terms, that where a purchaser fails to take and pay for goods (grain, etc.) sold, and the measure of the seller's damages is the difference between the contract price and the market price at the time and place of delivery, before the seller can conclude the purchases upon the question of damages by a resale of the rejected goods, it is essential that he should notify the purchaser of his intention to resell. A petition for damages, brought by a seller of goods against a purchaser who refused to take and pay for the goods, is subject to demurrer when it neither alleges the market value of the goods at the time and place of delivery nor that after notice to the purchaser the goods were resold by the seller and a price less than the agreed price realized at the resale.

Fay E. Van Voorhis recently brought suit against the Page Seed Company of Greene, N. Y., for \$1,400, but the case was dismissed.

Harry Wise, hay and grain dealer at Chelsea, Mass., has filed a petition in bankruptcy with liabilities placed at \$3,366.36 and assets \$650.

John T. Price, who has been conducting the Southern Grain and Hay Company at Columbus, Ohio, in partnership with Tillie A. Newton and Clinton E. Newton, has filed suit against the Newtons for an accounting.

In the case of Reel & Co. versus the Wolfe Bros. Elevator Company at Fremont, Ohio, a verdict was rendered in favor of the plaintiff for \$389.10. The special interrogatory whether the car load of wheat in question was merchantable red wheat No. 2

when billed at Fremont was answered in the negative.

E. C. Stevens, grain and feed dealer at Washburn, Wis., has filed a petition in bankruptcy, placing his liabilities at \$9,000 and his assets at about the same amount.

The Court of Civil Appeals of Texas has rendered the decision that a fire policy on a stock of "grain" in a building occupied as a grain warehouse covers the part of the stock therein consisting of "bran," made from grinding wheat.

Victor DeWein of Warrensburg, Ill., has filed suit against the Illinois Central Railroad, alleging that he has suffered unlawful discrimination in the provision of grain cars, and that he has been damaged thereby to the extent of \$5,000.

A. H. Price has brought suit against the Idaho Grain Company at Pocatello, Idaho, for the recovery of the price of a quantity of wheat sold the company last fall. It is alleged that the wheat was paid for with checks that were worthless.

Creditors of the Valparaiso Grain and Elevator Company of Bucyrus, Ohio, have filed a bankruptcy petition against the company, charging that it had extended a preference to certain creditors in transferring to them a portion of its property.

Hugh C. Waters, who is engaged in business at Atlanta, Ga., under the firm name of the Atlanta Seed and Produce Company, has filed a voluntary petition in bankruptcy. He has a listed indebtedness aggregating \$2,483.96, with assets amounting to \$697.

The Lake Erie Seed Company of Lackawanna, N. Y., has brought suit against the Pennsylvania Railroad and the Nickel Plate Line to compel the opening of the railroads' crossings at the plant of the company, claiming that a deed of 1881 provided for crossings.

Ira and Lloyd F. Wood of Yuba City, Cal., have been charged with arson. It is alleged that they set fire to the Meridian warehouses that were burned about a year ago, to cover a grain shortage after having disposed of grain that was the property of others, and also to collect insurance that was in excess of the amount risked.

In the two actions of the Chandler Grain and Milling Company versus John Shea versus the Chandler Grain and Milling Company, at Boston, Mass., the company was awarded \$4,888 and Mr. Shea was given \$5,929.69. The suits grew out of a contract whereby the company agreed to sell to Shea 5,000 bags of damaged meal. After the delivery of 200 sacks, the mill of the company burned. The company brought suits on the notes which



PRESIDENT FRANK KELLY

A. Waring, with Hulburd, Warren & Chandler, Chicago; secretary-treasurer, G. E. Green, with McDonald & Wyman, Minneapolis.

The directors are: P. N. Hoag, with William Dalrymple, Minneapolis; C. S. Treadway, with Carter Sammis, Minneapolis; W. L. Hoover, of Hoover Grain Co., Duluth; D. B. Shaw, with Gillfillan, Reymund Co., Minneapolis; H. R. Bertuleit, with C. H. Thayer & Co., Chicago; W. M. Christie, with J. H. Dole & Co., Chicago; W. M. Simmons, of Kansas City; J. L. Welch, Omaha; E. C. King, St. Louis; J. D. Wood, Milwaukee; O. C. Hess, Kansas City.

BRIEF NEWS

Cincinnati will be the scene of the convention of the Ohio Grain Dealers' Association in June, as well as the summer meeting of the National Council of Grain Exchanges.

More than 100 grain dealers, members of the Western Grain Dealers' Association, met at Fort Dodge, Iowa, on January 16 to confer with a number of railroad officials regarding the problem of car shortage.

The following firms have been received as members of the Illinois Grain Dealers' Association during January: Bradley Bros., Paducah, Ky.; P. S. Carter & Co., Girard, Ill.; The Cincinnati Grain Co., Cincinnati, Ohio; Henn & Beggs, Oakland, Ill.; Independent Hominy Co., Portsmouth, Ohio; M. D.

Shea had given and Shea filed suit for the recovery of damages for breach of contract.

Bruns & Stahl, grain dealers at Ritchey, Ill., have filed a petition in bankruptcy with liabilities placed at \$49,849.69 and assets, \$24,170.35. Goodwin Bros. have taken charge of the business.

The state of Kansas has brought suit against John I. Glover, operating the Frisco Elevator at Kansas City, Mo., for state grain inspection fees amounting to \$1,527.34; the Chicago, Rock Island & Pacific Railway, operating the Rock Island Elevator, for \$410.45, and the Chicago Great Western Railway, operating the Maple Leaf Elevator, for \$659.77.

The suit of James Carruthers & Co., Ltd., grain dealers of Montreal, Que., against E. A. Schmidt to recover \$24,317.62 involved in an oats deal was dismissed, the judge rendering the decision that according to law in the Dominion, verbal evidence cannot be adduced to prove a contract involving an amount over \$50. The case was rather extraordinary from the fact that in transactions amounting to thousands of dollars, it is claimed that not a particle of writing passed between the parties.

A permanent injunction has been filed against Harry B. Harryman and Rider Harryman at Wichita, Kan., restraining them from using the firm name of Harryman Bros. in the states of Kansas, Oklahoma, Texas and New Mexico. No action was taken pertaining to the states of Illinois and Maryland, in which the firm is doing business. The suit was brought by two brothers of the defendants, as the firms are engaged in the same lines of business, the broom corn trade. The plaintiffs, George H. Harryman and Frank S. Harryman claimed priority in the use of the firm name.

[Special Correspondence.]

GRAIN LEGISLATION IN NEBRASKA

BY T. A. BROWNE.

Less than the usual number of proposed laws relating to the grain business have thus far been introduced in the Nebraska Legislature. Of those already in the hopper only one has been acted upon, and it was killed. Here are the proposals in brief:

H. R. 78—Asks that the words "intentionally for the purpose of injuring or destroying the business of a competitor," be stricken from the anti-discrimination law. As now on the statute books this act is aimed at an alleged practice among line elevator companies of boosting the price of grain where they compete with co-operative farmers' elevators, and of making their profits from other elevators owned by them where no competition exists. The farmers of the 1907 Legislature put the law through. Now an amendment is sought which would make it a misdemeanor to discriminate whether intentionally or otherwise. It has not come from standing committee.

H. R. 436—The title of this bill reads, "To compel railway companies of Nebraska to afford and give to all persons and associations reasonable and equal terms, service, facilities, and accommodations for the transportation and terminal handling of grain and other property of every kind and description; to provide and compel the construction, equipment and maintenance of sidetracks, switches, and switch connections." The bill provides that railway companies must furnish connections between their main tracks and elevators, whether such stand on private ground or right of way, and that if the revenue derived from the business would not justify the outlay for connections the owner of the elevator must pay for the construction. The question of revenue can be fought out in the courts. The bill strikes out the clause that connections can only be compelled when the elevator to be supplied has a capacity of 15,000 bushels or more. It aims to make such connections compulsory even for loading from wagons.

H. R. 85—This bill seeks to give the handler of grain the right to fix up cars to hold grain without loss, and to put the cost of such repairs on the company. It provides that if the cars delivered for loading are in poor condition, the shipper may notify the local agent, and if cars are not repaired within five hours, shipper can make such repairs, and charge same up to the railway company. This bill is not viewed with favor by the committees in charge although not yet reported adversely.

H. R. 145—A bill seeking to make optional tests of grain by vertical section of wagon box or bin. The present law makes such test compulsory if any test is made. Grain dealers sought the optional provisions, saying that they are made violators of the law every day because of the strict provisions of the present statute. The legislature refused to make the change and the bill is dead.

H. R. 518—An arbitrary and flat reduction in freight rates on grain, coal, lumber, live stock, fruit, and potatoes, in carload lots, to 80 per cent of present rates, and making it necessary for railway companies if desiring an increase to secure an order for the same from the railway commission after proper hearing.

COMMUNICATED

[We invite correspondence from everyone in any way interested in the grain trade on all topics connected therewith. We wish to see a general exchange of opinion on all subjects which pertain to the interest of the trade at large, or any branch of it.]

INDIANA CROP IN FINE SHAPE

Editor American Grain Trade:—Winter wheat looking fine; good cover of snow. Oats in winter wheat were not killed before this last freeze—present spell should fix them. All corn is fine.

Very truly yours, PAOLI MILLING CO.
Paoli, Ind.

NEW DRESS IS PLEASING

Editor American Grain Trade:—The official paper of the Association came duly, and I was pleased to see it in its new dress. It is certainly very handsome and right up-to-date.

Very truly yours, S. W. STRONG,
Secretary, Illinois Grain Dealers' Association.
Urbana, Ill.

CORN AND WHEAT IN INDIANA

Editor American Grain Trade:—Corn is practically all sold in our immediate territory and so is wheat. Will receive probably 8,000 bushels of corn from now until new crop and about 5,000 wheat at Poseyville market. Growing wheat is looking fine.

Yours truly, P. REISING & SONS.
Poseyville, Ind.

LAWS REGULATING CARS

Editor American Grain Trade:—I would like to see different rulings on controlling laws regulating cars. The railroad companies should be subject to demurrage charges after two days from time car is ordered and the shipper should be compelled to use all cars ordered or pay penalty.

Yours truly, E. H. AVERY.
Bradgate, Iowa.

NORTHEASTERN ILLINOIS CROPS

Editor American Grain Trade: About twenty per cent of the crop has been marketed in this locality. The corn is of poor quality—very small, and grading No. 3. It is full of moisture. The car situation has loosened up considerably and we are now having much better treatment.

Yours truly, F. E. KELLY.
Mazon, Ill.

BUYS LARGE ELEVATOR

Editor American Grain Trade:—Please change my address from Jewell, Ohio, to La Porte, Ind., where I have bought a large elevator and will do a general feed business in connection with same. I have been in the grain business at Jewell for twenty-seven years and moved to my new address last week.

Yours truly, J. S. CALKINS.
La Porte, Ind.

MILWAUKEE HAPPENINGS

Editor American Grain Trade:—On February 5th notice was posted on the bulletin board of the Chamber of Commerce advising members that the C. M. & St. P. Ry. Co. had not paid an award of the Board of Arbitration which was affirmed by the Board of Appeals under date of December 7th, 1912, and further that the Railway Company was prohibited representation by any member of the Chamber of Commerce while the award remained unexecuted.

As a result of the petitions filed by the Milwaukee Chamber of Commerce, also P. C. Kamm & Co., with the Interstate Commerce Commission, in the matter of elevation allowances on grain transferred through Elevator "A," operated by C. M. & St. P. Ry. Co., that company has now issued its tariff, effective March 4th, 1913, which provides that on grain transferred through elevator owned and operated by the Railway Company, and the grain is forwarded by its lines or connecting lines in accordance with published tariffs under which an elevation allowance is made to the company, the amount will in turn be paid to the owner of the grain.

The Cary Time Filing Bill, H. R. 3010, was endorsed by the Board of Directors on January 14th

in the form of a resolution which was drawn up and sent to Wisconsin members of Congress.

Yours very truly, H. A. PLUMB,
Secretary Chamber of Commerce.
Milwaukee, Wis.

LESS CORN SHIPPED

Editor American Grain Trade:—The farmers are selling but very little corn here. Our corn was very poor this year, and there will be less shipped than last year. Oats about all shipped out.

Yours truly, T. U. FOX.
Sinclair, Ill.

CROP MOVEMENT IN INDIANA

Editor American Grain Trade:—Corn has moved pretty freely from this territory, probably not over 30 per cent yet back of 1912 crop. Corn is grading better than usual and has all winter. Oats nearly all marketed, probably 20 per cent back yet.

Yours truly, C. CUNNINGHAM.
Hamlet, Ind.

TERMINAL TREATMENT GOOD

Editor American Grain Trade:—The two grain journals that I am getting at the present time, I acknowledge are a great help to me or any grain man who will read them. With regard to corn will say that 65 per cent has been sold. The quality is rather light weight but is as dry as one could wish to have it. As to our terminal treatment will say that they are all good fellows, especially so at convention times.

Very respectfully yours, SETH JONES.
Winnetoon, Neb.

BELIEVES CHANGE IS BECOMING

Editor American Grain Trade:—I want to congratulate you on the becoming new dress of the "American Grain Trade." This is certainly a very fine change, not only in the cover, but throughout the publication and the general make-up of the entire journal. I am sure this is a good advertisement for you and believe the trade will appreciate it. With best wishes for your continued success, I am.

Yours very truly, J. VINING TAYLOR,
Sec'y-Treas., National Hay Association.
Winchester, Ind.

KIND WORDS FROM TOLEDO

Editor American Grain Trade:—Allow us to compliment you upon your "new gown." It comes at a time when everybody and everything are putting on new things, and should attract attention, more subscribers, more advertisers and more friends.

We always enjoy reading the contents of the green-covered journal, and wishing you the success you deserve, beg to remain.

Yours truly, J. F. ZAHM & CO.
Toledo, Ohio.

NO CAR SHORTAGE COMPLAINTS

Editor American Grain Trade:—No winter wheat harvested in this section last year, owing to the crop being winter killed. No surplus corn for shipment this year as the crop was light owing to drouth. Large crop of oats harvested, being largely used on the farm for feed. The present crop of winter wheat is reported in fine condition. No complaint for lack of cars; no complaint made by shippers of conditions at terminal markets for grain, but much complaint made on shortage in weights on hay.

Yours truly, W. S. GRAY.
Coatsburg, Ill.

Grain elevators along the line of the Omaha Railroad have been full for some time and a marked shortage of cars for transporting the grain to Chicago and Minneapolis has been seriously felt.

Many farmers are writing to the Kansas Agricultural College for help in marketing their corn, and that institution has issued a statement setting forth that it neither buys nor sells but will act as a free agent for both the producer and the buyer.

TRANSPORTATION

About thirty grain elevator men in conference at Woodward, Okla., on January 31, discussed the question of securing better shipping rates from the Wichita Falls & Northwestern Railway Company.

The Chicago, Milwaukee & St. Paul Railway has completed the work of increasing the trackage capacity for the handling of grain at the various yards in Milwaukee so that the facilities are now considered excellent.

Reid & Sarlie of East Grain Forks, Minn., filed a complaint with the Interstate Commerce Commission on January 23, against the Great Northern Railroad, to have a cleaning-in-transit-rate established at East Grand Forks.

Announcement was made recently by the New York Central lines that the car movement of that system for January was 1,974,849 cars, largest in the history of the company, and an increase of 324,702 cars over January, 1912.

It is reported that the equipment order of the St. Paul road for 1913, totals 6,000 freight cars. Car builders cannot promise deliveries for at least four months, and a large proportion of the new rolling stock will not be in service for six months.

A resolution has been adopted by the Montana Legislature, introduced by Senator Edwards to investigate the charges made by railroads in Montana for hauling wheat to eastern markets, and a committee has been appointed for this purpose.

Advances in grain rates from South Dakota, portions of Minnesota and Northwestern Iowa, which were to be effective February 15, have been ordered suspended by the Interstate Commerce Commission upon protests made by the Chicago Board of Trade and others.

Refusal of the Santa Fe, Alton, Illinois Central, Wabash and Chicago & Eastern Illinois railroads to absorb certain switching charges on grain shipments at Chicago induced the Chicago Board of Trade to file with the Interstate Commerce Commission a request that the rule be enforced.

Although approximately 40,000 cars will be added to the freight equipment of Northwest railroads within the next six months it is declared that the carriers will be severely taxed to meet the demands upon their traffic facilities next fall. The unusually heavy snowfall will, it is thought, be productive of heavy crops.

The Cavers Elevator Co., Omaha Elevator Co., Middle West Elevator Co. and Trans-Mississippi Grain Co., recently filed complaint with the Interstate Commerce Commission against the Missouri Pacific and the Omaha Bridge and Terminal Railway, claiming that the railroads have failed to absorb switching charges.

According to a recent statement of the Canadian Pacific Railway, this season's shipments consisted of 41,877 cars of wheat, and 14,105 cars of other grains to the elevators, and 11,147 cars of wheat and 3,948 cars of other grains shipped direct. The totals show, 71,077 cars of grain this year, as compared with 48,379 cars last year.

Upon the application of the Chicago Board of Trade, the Interstate Commerce Commission has advised that hereafter it will require the carriers to give the full statutory notice of 30 days in the publication of rates which are based upon orders of the Commission, unless the order of the Commission definitely fixes the rates to be published.

The rates on grain from points in Kansas to points in Texas, over the Union Pacific and Atchison, Topeka and Santa Fe railroads, and from Kansas and Missouri points over the Chicago, Rock Island and Pacific to Chicago, have been termed unreasonable by the Interstate Commerce Commission, although no order has yet been made in the case.

Need of better facilities for handling export grain in Philadelphia was emphasized recently when two British steamships, the *Glace Bay* and *Crown of Toledo* were forced to leave the Girard Point Elevator and finish loading their cargoes from floating elevators. The wharf was of inadequate size to permit the loading of 360,000 bushels on the former and 306,000 bushels on the latter vessel.

H. G. Wilson, transportation commissioner of the Commercial Club, of Kansas City, has completed the compilation of grain rates from every station in Kansas, Oklahoma and Nebraska to the principal basing points in the Middle West. The compilation has been published in book form and is being distributed among members of the Kansas City Board of Trade and the correspondents throughout the three states. The book is especially designed for

ready reference, and is to be kept up to date by the issuance of supplements and revisions of the book.

A portion of the Great Northern extension from Snowden, Mont., to Sidney, Mont., is now in operation for the handling of freight, a tariff being made effective from Snowden to a point about thirty miles south. There are about 200,000 to 250,000 bushels of grain lying in elevators along the line, that will be hauled out before March 15, which is the latest date that it is expected it will be possible to use the temporary bridge over the Yellowstone river.

Transportation of the grain crop on the lines of the Great Northern and Northern Pacific railways will necessitate the movement of approximately 700 loaded cars daily from the Northwest until June 1, 1913, according to reports from the operating departments of the two roads. The railroads are loading a daily average of 400 cars and it has been necessary to keep every available piece of rolling stock in service since the heavy movement began last fall.

CAR SHORTAGE IN ILLINOIS

Leading grain shippers of Illinois appeared before the Railroad and Warehouse Commission at Chicago, on Tuesday, February 11, at a public hearing given in connection with the case of the Danforth Farmers' Elevator Company vs. the Illinois Central Railroad. Although no decision was made by the commission, it was announced by them that the various points brought up by the speakers would all be replied to in detail and that the matter would in the end be adjusted satisfactorily. President Metcalf and Secretary Strong of the Illinois Grain Dealers' Association, both made short addresses on the question and Secretary J. A. McCreery of the Farmers' Grain Association, suggested for the consideration of the Commission that a rule be established so that the same distribution of cars be made in times when the cars are scarce as when cars are plentiful. In other words, if one grain elevator is receiving 10 cars a day and a competitor in the same town is receiving 2 cars a day, when the cars are scarce the available cars be divided according to the proportions which originally obtained.

Many speakers urged that the Commission compel the various railroads to build sufficient cars to take care of the business, but it was pointed out by the commission that this was clearly beyond their power. The attorneys for various railroad companies were present and all claimed a thorough

willingness on the part of their respective companies to give the grain dealers as good service as possible, but urged that under the present Illinois statute by which every shipper must share alike in the distribution of grain cars, it was impossible for them to satisfy the larger shippers. It was also stated by them that in order to facilitate loading and unloading of cars, the demurrage charges be increased, especially during the winter months.

ELEVATION ALLOWANCES

Under date of January 27, Bulletin No. 200 was issued by W. M. Hopkins, manager of the Transportation Department of the Chicago Board of Trade. This bulletin reads as follows:

"We are advised that the Interstate Commerce Commission has issued an order requiring all carriers at the Missouri and Ohio rivers to abstain, on or before March 1, 1913, from the payment of any sum in excess of $\frac{1}{4}$ cent per bushel for the elevator transfer of grain, including free storage for 10 days.

"The Commission states that its order is made applicable only upon the Missouri River and Ohio River because it understands that at the present time the allowance of $\frac{1}{4}$ cent per bushel is generally applicable in other territory, but that if higher allowances are paid in such other territory, which are complained of as discriminatory, a further order or orders will be made."

RAILROADS WIN HAY RATE CASE

The application of the railroads in the Northwest for permission to advance rates on hay from points in Minnesota, Wisconsin, North and South Dakota, Iowa and Illinois to Chicago was granted on January 25, by the Interstate Commerce Commission, the new rates becoming effective immediately. The railroads gave notice of these advances early last year, but because of protests from hay shippers in the Northwest the proposed increases in rates were suspended pending investigation.

Except for two stations in Minnesota, where the advance is $5\frac{1}{2}$ cents per hundred pounds, the increases range from $\frac{1}{2}$ to $4\frac{1}{2}$ cents, and are said to average, generally, about 2 cents.

Under western classification, hay takes the class C rate, but to Chicago and other terminal markets, commodity rates lower than this class have generally obtained. The advances permitted bring the rates up to the class C basis in most instances, the exception being in the case of long hauls, and in the case of the Milwaukee road, which has observed a maximum advance of $3\frac{1}{2}$ cents. To Minneapolis, Milwaukee and St. Louis the commodity rates have been advanced to the same basis, but as the class C rates to Chicago and to other markets do not always represent the same spread as the commodity rates, the increases to Chicago are greater in a number of instances.

CHANGES IN RATES

These changes in rates affecting grain and grain products are furnished to the "American Grain Trade" by the General Traffic Association, Inc., 715 Fourteenth Street, N. W., Washington, D. C. If any of our readers feel that the present rates or those which are about to become effective are unjust, excessive or discriminatory, this company has agreed to take care of such matters before the Interstate Commerce Commission, at only a nominal cost.

During the past thirty days the following rates and changes in rates on grain and grain products have been filed by the various carriers, with the Interstate Commerce Commission, in cents per hundred pounds unless otherwise stated, and effective date of tariff is also given.

C., M. & St. P.—Sup. 16 to I. C. C. B-2354, March 1.—Malt from Red Wing and Winona, Minn., to Amboy, Bloomington, Vinton and Culton, Ill., and Decatur, Ill., $13\frac{1}{2}$ c; to Dixon, El Paso, Hendrix, Hudson, Cappa, Kerick, Forsyth, Haldane, Hekle, Heyworth, and Eldena, Ill., $13\frac{1}{2}$ c.

Also Sup. 11 to B-1334, February 15.—Barley, corn and oats to Peoria, Ill., from Everly, 16c; Sheldon, 17c; Sheldon Junction, 17c; Boyden, 17c; Hull, $17\frac{1}{2}$ c; Rock Valley and Inwood, Iowa, $17\frac{1}{2}$ c; also other rates to various points.

C., R. I. & P. R. R.—Sup. 6 to I. C. C. C-9387, April 12.—Wheat and corn (applicable only on shipments having origin at points other than Kansas City, St. Joseph, Mo., Atchison, Leavenworth, and Armourdale, Kan., from which no through rates are published), Leavenworth and Armourdale, Kan., to Devol, Granfield, Loveland, Hollister, Frederick,

Tipton, Humphreys, Okla., wheat, 25c; corn, 23c; to Altus, Okla., wheat, 24c; corn, $21\frac{1}{2}$ c.

Also Sup. 7 to I. C. C. C-9349, R. R. 19700, March 4.—Between St. Paul, Minneapolis, Minnesota Transfer, and Stafford and Butler, Okla., wheat, 29c; corn, 28c (R.); flaxseed, $45\frac{1}{2}$ c; alfalfa feed, 27c; hemp seed, $48\frac{1}{2}$ c; broom corn, 68c.

Also Sup. 6 to I. C. C. C-9334, March 4.—Between Humphreys, Okla., and Chicago, Ill., flax seed, 41c; millet seed, 41c; broom corn seed, 44c; broom corn, 65c.

Also Sup. 6 to I. C. C. 9383, March 9.—Wet feed from Kansas City, St. Joseph, Mo., Atchison, Leavenworth, and Armourdale, Kansas City, Kan., to Des Moines and Ottumwa, Iowa, 10c.

D. S. S. & A. R. R.—Sup. 5 to I. C. C. 1997, March 6.—Grain, flour and grain products, from Duluth, Minn., Superior and Superior East End, Wis., to Chatham, Mich., $12\frac{1}{2}$ c (R).

K., M. & T. R. R.—Sup. 9 to I. C. C. A-3395, March 1.—Broom corn, between St. Louis, Mo., East St. Louis, Alton, Ill., Hannibal, Mo., and East Hannibal, Ill., and Devol, Okla., 55c; between Granfield, Okla., and Kansas City, St. Joseph, Mo., Leavenworth, and Atchison, Kan., 47c; Granfield, Okla., and Peoria, Ill., 60c; Chicago and Kankakee, Ill., 65c.

NORTHERN PACIFIC.—I. C. C. A-2260, March 4.—Malt from Chicago, Ill., to Cape Girardeau, Mo., $15\frac{1}{2}$ c; from East Joliet and Joliet, Ill., to Cape Girardeau, Mo., $15\frac{1}{2}$ c; basis $7\frac{1}{2}$ c to St. Louis, Mo.

Also Sup. 6 to I. C. C. 4840, March 3.—From Du-

luth, Minn., Superior, Superior East End, and Central Avenue (Superior), Wis., to Chicago, Ill., Peoria, Ill., Milwaukee, and Manitowoc, Wis., flaxseed, flaxseed hulls, screenings, and millet seed, 10c (A.); flax bran, shives and refuse, 7½c (applies only on shipments originating beyond or milled or separated from seed originating beyond).

UNION PACIFIC.—I. C. C. 2548, March 15.—Between Clyde, Kan., and Kansas City, Mo., Leavenworth, Kan., Atchison, Kan., St. Joseph, Mo., wheat, 11c; corn, 9½c; oil meal, 9½c; flaxseed, 12½c; millet seed, 12c; broom corn, 31½c; between Clyde, Kan., and Omaha, Neb., wheat, 18c; corn, 15½c; oil meal, 15½c; flaxseed, 21c; millet seed, 21c; broom corn, 37½c; between same and Denver, Colo., wheat, 30c; corn, 25c; oil meal, 25c; broom corn, 45c. This tariff contains many other rates.

C., M. & ST. P. R. R.—Sup. 16 to I. C. C. B-2354, March 1.—Flour from Sioux City to New Orleans and Algiers, La., 29.1c; flour only from Westville, Okla., to Texarkana, 20c; cornmeal only, 18c; oat products from Kansas City, Mo., when originating at Cedar Rapids, Fort Dodge, and Muscatine, Iowa, to Texarkana, 16c.

BURLINGTON.—February 20, from Swanwood and Yoder, Ia., to Chicago, Ill., flaxseed, 18c (R.); wheat, 13.9c, 12.5c; to Peoria, Ill., flaxseed, 15.5c (R.); wheat, 12.4c; corn, 11c; to Hannibal, Mo., flaxseed, 15.5c (R.); wheat, 12.4c, and corn, 11c; to St. Louis, Mo., flaxseed, 18c (R.); wheat, 13.9c, and corn, 12.5c.

Also, effective February 20, wheat from East Bridger, Mont., to Billings, Mont., 10c (R.).

CHICAGO & EASTERN ILLINOIS.—February 17.—Malt from Auburn Park, Chicago, Chicago Heights, Dolton, Englewood, Kensington and Momence, Ill., to Terre Haute, Ind., 5.2c.

CHICAGO GREAT WESTERN.—February 20.—Wheat to Chicago, Peoria, Ill., and Streator, Ill., from Kansas City, Mo.-Kan., Leavenworth, Kan., and St. Joseph, Mo., 19.5c; from Council Bluffs, Ia., Omaha and South Omaha, Neb., 18.5c.

CHICAGO, ST. PAUL, MINNEAPOLIS & OMAHA.—February 15.—Between Chester, S. D., and Chicago, flaxseed, 22c; wheat, 19c, and corn, 19c; between Chester, S. D., and Duluth, Minn., flaxseed, 20c; wheat and corn, 17c.

Also effective January 25, from Duluth, Minn., Superior, Superior East End, and Itasca, Wis. (originating beyond), to St. Louis, Mo., flaxseed and screenings, flaxseed hulls, millet seed, flax bran, shives, 16c; wheat and buckwheat, 14c; barley, corn, elevator dust, flour, refuse grain screenings, malt, malt sprouts, mill refuse, oats, oat clips, and articles taking same rates, 12.5c; to East St. Louis, Ill., flaxseed and screenings, flaxseed hulls, millet seed, flax bran, shives and refuse, 14c; barley, corn, elevator dust, flour refuse, grain screenings, malt, malt sprouts, mill refuse, oats, oat clips, and articles taking same rates, 11.5c.

GREAT NORTHERN.—February 16.—Between Chicago, Ill., and Manley, Minn., flax or millet seed, 21½c; wheat or flour, 18c (A.); rye, barley, corn, oats, 17c; between Chicago and Hills, Minn., flax or millet seed, 22c (A.); wheat or flour, 18c (A.); rye, barley, oats or corn, 17c.

ILLINOIS CENTRAL.—February 15.—Between Chicago and rate points and Charles City, Floyd, and Orchard, Ia., flax and millet seed, 17.5c; wheat and flour, 15.5c; barley, corn, oats and rye, 13.3c (A.).

MISSOURI PACIFIC.—February 20.—From Omaha, Neb., and Council Bluffs, Ia., to Joplin and Purcell, Mo., 16c; from St. Joseph, Mo., to Falls City, Neb., 6½c.

ROCK ISLAND.—February 15.—Malt and malt sprouts from Rock Island, Ill., to Aurora, Ill., 9.72c; linseed oil cake and meal from Minneapolis, Minn., to Sioux Falls, S. D., 10.5c; to Kansas City, Mo., Armourdale, Kan. (Kansas City, Kan.), Atchison, Leavenworth, Kan., St. Joseph, Mo., Omaha, Neb., South Omaha, Neb., and Council Bluffs, Ia., from Chicago, 11.5c; Peoria, 9c; Rock Island, 6.5c; St. Paul, Minneapolis and Minnesota Transfer, Minn., 10.5c.

SANTA FE.—February 20.—Alfalfa meal from Hartman, Kornman, Wiley and McClave, Colo., to Denver and Colorado Springs, Colo., 14c.

CHICAGO & NORTHWESTERN.—February 15.—Between Mankato, Minn., and Hurley, Wis., Marinette, Wis., and Michigamme, Mich., wheat, 18½c (R.); corn, oats, rye and barley, 18c.

CHICAGO, ST. PAUL, MINNEAPOLIS & OMAHA.—February 22.—Between Vernon, Center Amboy, Winnebago, Blue Earth, Elmore, Minn., and St. Paul, Minneapolis or Minnesota Transfer, Minn., flaxseed, 12c; wheat and coarse grain, 9c; Itasca, Ashland, Washburn or Bayfield, Wis., Superior, Superior East End, Duluth, Minn., flaxseed, 15½c; wheat and coarse grain, 13c; between same points and Chicago, Ill., Milwaukee or Manitowoc, Wis., flaxseed, 18½c; wheat, 16½c, and coarse grain, 15½c.

GRAND TRUNK.—March 3, grain and grain products from Buffalo, Black Rock and Suspension Bridge, N. Y., to Hoopston, Ill., 13c (R.).

ROCK ISLAND.—March 5.—Grain products to Rutland, Toluca, Custer, Porterfield, Big Sandy, Henry Junction, Magnolia, Price Valley, McNabb and Granville, Ill., from St. Paul, Minneapolis, Minnesota Transfer, Minn. (proportional only), 12½c; Albert Lea, Briceyn, Walters, Conger, Minn., and Rake, Iowa, 15c; Owatonna, Minn., 15c; Pipestone Minn., 17½c; Worthington, Minn., 17½c; Sioux Falls, S. D., 18c; Watertown, S. D., and White, S. D., 19c; Dundas, Faribault, Farmington, Hope, Northfield, Rosemount, Minn., Cedar Falls, Cedar Rapids, Decorah, and Waterloo, Ia., 15c.

Also effective February 24, grain products, viz.: oatmeal, rolled oats and oat groats, also wheat and other articles from Chicago, Ill., and Muscatine, Ia., to Stillwater, Minn., 15c.

ROCK ISLAND.—State, January 26, Interstate, March 1.—Between St. Paul, Minneapolis, Minnesota Transfer, South St. Paul and Gordonsville, Minn., flaxseed, 11c; wheat, 10c (R.); corn, rye, oats and barley, 9½c.

Also effective March 1, between Lathrop, Mo., and Kansas City, St. Joseph, Mo., Atchison and Leavenworth, Kan., flaxseed and wheat, 7c, and corn, 6c.

BARLEY AND MALT

[Special Report.]

CHICAGO BARLEY MARKET

BY A. L. SOMERS.

President Somers, Jones & Co., Chicago.

The barley situation since the last report has become stronger with the continued light movement. Malting qualities have advanced from 1 to 2 cents per bushel during the past week, without showing a quotable advance on any one day. The quality of the receipts has improved somewhat and today as high as 71 cents was paid for strictly fancy quality, with more ready sale also at from 65 to 70 cents for good to choice qualities.

Export feed barley is weak, the direct result of the weak barley situation abroad. Local buyers are paying 49 cents for export feed, but are getting little. The receipts are so light that the domestic demand for chicken and other feed mixing purposes is sufficient to absorb the offerings. We quote feed from 49 to 52 cents, mainly from 50 to 52 cents, and malting from 53 to 71 cents, mainly from 55 to 66 cents.

Trade conditions are not materially changed from those ruling of late. Country shippers advise full elevators and continued scarcity of cars. They are willing enough to move their barley if cars were obtainable. There is nothing in sight on which to base a belief in any improvement of moment in the malt situation and it looks like continued light deliveries in the central markets. The large proportion of the crop back in farmers' and shippers' hands, being, under the circumstances, not freely available, it will probably mean well maintained prices to the end of the season, and, should the expected demand on account of the low price, for carrying-over into the next crop, materialize, it may be that values will hold well, even on the probable increased receipts during the Spring and Summer months.

HOW WISCONSIN PEDIGREED BARLEY WAS PRODUCED

It has been said that scarcely more than a dozen years ago a pure strain of barley was practically unknown and that fields of this grain showed a wide diversity of grades and species—some bearded and others beardless; plants bearing heads with two rows of grain and stalks bearing four or six rows of grain to a head, while some kinds had hulls and some were devoid of this protection. Also, the growers were unable to discriminate between good and bad barley with the result that the various species matured at different periods and the barley thus harvested reached the malting floor with great loss. The maltster also stood heavy losses as the mixed grades of barley germinated anywhere from two to six days. In 1899 Professor R. A. Moore of the Agricultural College at Madison, Wis., determined to rear, if possible, a family of barley "blue-bloods" and he has succeeded so splendidly that the progeny of a carefully nurtured family of grains has encompassed the earth.

Professor Moore and his associates began with a handful of 40 grains to develop plants that would mature uniformly, germinate in a given length of time on the malting floor and also produce larger crops to the acre. At that time Wisconsin planted about three-quarters of a million acres to barley annually and the average yield was said to be less than 30 bushels to the acre while the supply was unequal to the demand. He chose barley named "Oderbrucker," a species that had been somewhat developed in the Canadian College at Guelph, Ont., "Manshury" which had undergone some training in the Wisconsin College and a number of other species. For three years these probationers were submitted to tests during their cultivation and the survivors, the "Oderbrucker," "Manshury," "Golden Queen," and "Silver King" and a few others, proved so satisfactory in their preliminary examinations

that they were allowed to enter the actual race for supremacy.

There were exactly 3,000 grains of each variety when the final training began. They were planted four inches apart surrounded by border rows of the discarded grains. Professor Moore and his helpers gave each stalk individual attention and the plants showing rapid growth, length and uprightness of straw, vigorous filling out of the head and general strength, were marked. About 20 plants out of the hundred in each group were eligible for further training and the heads of these were cut off and weighed and the 10 heaviest were saved for the work of the following year.

The grains from these 10 heads of each variety were planted the second year in beds marked off into squares, in each of which was planted a grain of barley, 100 grains to the bed. At the end of the season the 10 best heads were chosen from each bed for the third year's course of training and similarly the same plan was followed the next year. At the beginning of the fourth year the plants bearing heads with two or four rows of grain and the hullless and beardless varieties were eliminated from the race because of various defects and six varieties of 6-rowed, bearded barley continued for honors.

During the fourth year training one of the academic students inquired concerning "pearl barley" as his father was a manufacturer of this product. "Please find out from your father what qualities in barley best adapt it to the 'pearling' process," Professor Moore directed the boy, "and ask him, what special difficulties he has to overcome in the barley he now gets." This inquiry brought the information that about 20 per cent of the barley used by the manufacturer turned blue in the pearling process, and it was necessary to eliminate the discolored grains. Samples of the six varieties were given the pearling test and every grain of two species turned blue and not one grain of the other varieties became discolored. The unfortunate two were barred from further training and the fifth year began with "Oderbrucker," "Manshury," "Golden Queen," and "Silver King."

The work of selection continued and during the sixth year there was enough seed, selected from the best heads to sow a sixth of an acre, while the seventh year an acre of each was sown and the eighth year 20 acres were sown. It would have required 1,000 acres to utilize the next selection of grain, and as the open market would have meant the deterioration of the selected grain by admixture with inferior stock, Professor Moore had formed the Wisconsin Agricultural Experiment Association to meet this and other similar contingencies. The members of the association were supplied with seed and agreed to plant and cultivate the samples under careful test conditions, to make detailed reports of results and to unite in growing for seed for sale only the varieties that proved the best. The members of the Association discovered the superiority of the "Oderbrucker" barley over the "Manshury" by an average of five bushels to the acre, and it came to be called "Wisconsin Number 55" and "Wisconsin Pedigreed Barley." Patches of barley were planted by 1,000 members of the Association in 1910 and the grain was practically all saved for seed and in 1911 a much larger acreage was given over to the grain, the seed resulting being sufficient not only for all the needs of Wisconsin, but for thousands of acres throughout the earth. The pedigreed barley produced a crop upon which the farmer and also the maltster could depend. It is now used in Russia, Germany and several other countries.

William V. Kelley of the Chicago Consolidated Brewing and Malting Company recently purchased property in Chicago on Illinois Street, the lot being 300x100 feet in size, and property on East Michigan Street, 150x100 feet in size, for \$260,000 cash. The first property is improved with an old malt

house and the second with an elevator. Both houses will be removed, and it is reported that the land was purchased as an investment.

The Canada Malting Company, Ltd., of Calgary, Alta., has completed the construction of a reinforced concrete barley elevator with a capacity for 500,000 bushels, and a six-story brick and concrete malt house with 32 tanks 90 feet high.

Wisconsin won the barley championship at the National Corn Exposition, Columbia, S. C., with Oderbrucker barley grown by Assemblyman Krueger of Beaver Dam, Wis., and with Wisconsin Pedigreed barley grown by N. R. Raessler of Beloit, Wis.

The Milwaukee Maltsters' Traffic Association recently filed a complaint before the Interstate Commerce Commission against the eastern carriers, in which it sought to obtain the same elevation or

transfer allowance on shipments of malt as is now granted to operators of elevators on shipments of grain.

According to reports, San Joaquin, Cal., is first among the 58 counties of California in the annual production of barley.

The average production of the leading barley states is as follows: Wisconsin, 24,843,000 bushels; Minnesota, 42,018,000; North Dakota, 35,162,000; California, 41,760,000; South Dakota, 23,062,000; Iowa, 11,570,000; Washington, 7,809,000, and Idaho, 6,916,000.

It is said that the capacity of the malting establishments of Milwaukee, Wis., is 11,400,000 bushels of barley annually, and, including the brewers which manufacture malt for their own use, brings the total malting capacity of the city to 15,000,000 bushels annually.

A NEW SEED INDUSTRY

Drying and preparing seeds of the giant fir, cedar and spruce trees of the Northwest for shipment to all parts of the world is a new industry just started at Sequim, Wash. A large drying house is nearing completion. It will operate on a large scale having a capacity of 600 bushels of cones on each floor, and being able to handle 6,000 bushels of cones in a season. With the exception of the Federal forestry drying house at Weythe, Ore., the establishment at Sequim will be the most complete forest seed-curing concern on the Pacific coast.

MINNESOTA ORGANIZES FOR SEED IMPROVEMENT

At a recent conference at the University of Minnesota College of Agriculture it was determined to organize the entire state with county associations for the purpose of raising improved varieties of seed grains for use by all farmers. Professor C. P. Bull, secretary of the Field Crop Breeders' Association, was named as organizer and inspector. The statewide movement for better seed grains will be pushed by the college and extension division, and the Field Crop Breeders' Association will be financed by Bert Ball, of Chicago, secretary of the Federated Grain Exchanges of the United States.

Breeding associations will be formed in every county in the state under the direction of Professor Bull, and sections of land will be set aside for the cultivation of seed grain, which will then be distributed to the farmers for planting. Experimental unions will be formed of graduates of the agricultural schools at St. Anthony Park, Morris and Crookston, to co-operate in the movement.

ALFALFA SEED IN MINNESOTA

Up to the present time what little alfalfa seed has been raised in Minnesota has been grown largely in Carver County, according to A. C. Army of the Minnesota Experiment Station. There are, undoubtedly, other counties in the state just as well or better suited to alfalfa hay and seed production than is Carver County. The time is probably coming in the very near future when alfalfa seed will be purchased in every county in the state. Up to the present time alfalfa has not been as sure a seeder as has medium red clover. However, it will probably be found that in some localities in the state it will produce seed in paying amounts. The indications are that it will seed more heavily in the northern half of the state, particularly on soils leaning toward a sandy character.

It is always well to go into any new crop slowly, learning by experience most of the details necessary to successfully handle it. A great many trials of alfalfa are being made in Minnesota, some on a small scale and others on quite extensive scales. A report of success is always encouraging. In the spring of 1911, three acres were sown to alfalfa in the eastern part of Polk County. In 1912, the first crop was cut for hay and the second crop left for seed. The grower cut the first crop for hay just at the right time, which is one of the essentials to getting a good yield of seed in the second crop. The second crop was cut in October and produced 250 pounds of a good grade of seed. This is better than 80 pounds of seed per acre. A yield of two bushels per acre is a good yield. Yields are on record in the state of Minnesota of ten bushels per acre, but such figures are exceptional.

THE NEW CHAMPION "COST OF LIVING" REDUCER.

From the Chicago Record-Herald.



FIELD SEEDS

A seed business has been opened at Garden City, Mo., by Wildeboor & Remington.

The Baldwin Elevator Company of Ivesdale, Ill., has engaged in the seed business.

A seed fair was recently held at Dauphin, Man., and there was a fine showing of seeds.

E. N. Cook has completed the construction of a small seed warehouse at Plymouth, Ind.

The third annual seed fair under the auspices of the Tofield Agricultural Society was held at Tofield, Alta., on February 8.

The Lake Shore Seed Company of Dunkirk, N. Y., has opened a branch office at Woodstock, Ont., to handle its Canadian business.

Oscar H. Will & Co., seed dealers at Bismarck, S. D., have practically completed the remodeling of a building which they will soon occupy.

The Michigan Experiment Association will hold a special meeting at the Michigan Agricultural College at Lansing, on February 26 and 27.

It is reported that the pure seed bill which was passed at the 1911 session of the Nebraska Legislature will soon be put into full effect by the Food Commission.

J. H. Everett & Son, wholesale seed dealers at Atlanta, Ga., have doubled their storeroom space, and the business is now conducted under the name of the Everett Seed Company.

Webb McConnell, general manager of the Green Valley Seed Company, Oakland, Iowa, recently shipped a consignment of 275 bushels of blue grass seed to Bohemia in Europe.

The Gaston Seed and Provision Company has been incorporated at Gastonia, N. C., with a capital stock of \$10,000. The incorporators are A. C. Stroup, E. C. McLurd and G. L. Stroup.

The Market Seed Company has been incorporated at Los Angeles, Cal., with a capital stock of \$10,000. The incorporators are J. S. Cannon, J. J. Gallagher, E. E. Sidebottom, R. W. Allen and G. H. Brooks.

The Busch Seed Company of Lawrence, Kan., recently purchased the Pierson Mill, with a frontage of 150 feet, and the three-story building is used entirely by the company. A feed mill will soon be installed.

Approximately \$3,000 has been assured for prizes for the school children of Washington, who will engage in an elaborate seed-growing contest, to be conducted under the supervision of the Washington State College.

The recently organized Iowa Agricultural Experiment Association will distribute different varieties of grain to farmers throughout the state that tests may be made under the direction of the Agricultural College at Ames.

The Pure Seed Association of Crookston, Minn., recently held a meeting and the officers for the year were elected as follows: J. F. Ingersoll, president; M. G. Malin, vice-president, and Prof. Otto I. Bergh, secretary and treasurer.

L. B. Ransom has disposed of his interests in the Champaign Seed Company at Champaign, Ill., to Howard Nash. B. C. Henness, the other stockholder, continues as manager. The capital stock will be increased and the business conducted on a larger scale.

A bill has been introduced in the Pennsylvania House of Representatives to regulate the sale of seeds. The object is to make it unlawful for any person or firm to offer for sale any seeds of timothy or other grasses, or any of the several varieties of clover or alfalfa, or any mixture of such seeds,

which shall contain five per cent of certain specified weeds.

Postmaster General Hitchcock, in a recent order, permits the sending of seeds, bulbs and plants in boxes with nailed lids by parcel post at the fourth class rate, instead of first class. Parcels sent to foreign countries, including Canada, Cuba, Mexico and Panama, must be accompanied by ordinary stamps.

Senator Olson recently introduced a bill in the Minnesota Legislature providing that any person, firm or corporation who offers for sale or distribution any seeds without a label on the package indicating impurities, percentage of germination, date of test and place of growth, be made liable to a fine.

More than \$1,500 in cash premiums will be distributed by the Commercial Club of Mankato, Minn., to the winners in seed exhibits at the annual meeting of the Minnesota Field Crop Breeders' Association and mid-winter seed show which will be held in Mankato, from the twenty-fifth to the twenty-eighth of this month.

It is reported that according to a Federal census, North Dakota has practically half of the total flaxseed acreage of the entire country, and that the acreage in Montana has increased to 38,000 acres in the past 10 years. In Iowa, Kansas, Minnesota, Nebraska and Missouri there has been a decrease in acreage in the past decade.

The Northfield Seed and Nursery Company of Northfield, Minn., will erect a seed corn drying house of 12,000 bushels' capacity next summer. It has adopted the trade mark "Northfield Pedigreed" for its seed corn raised in the vicinity of Northfield, and it is calling its highest grades of clovers and grass seeds "Carleton" and "St. Olaf."

J. F. Zahm & Co., Toledo, say of the clover seed market February 8: In our opinion March showed up pretty strong by not declining more than it did with zero weather prevailing in many of the states where the clover demand comes from. Either the March longs are not as numerous as expected, or else they are more positive of their position than usual, because ordinarily with a week of this kind of weather, and February deliveries just made, many longs would weaken. The cash demand has been fair considering the "coldness," and there have been shipments of prime to Canada. Receipts are not large and include some carloads, presumably from some other market. The stock here is 29,000 bags, and it is going to be a question of how the buyers come in and what the present holders do. If the latter stand pat and the receipts do not increase, it looks like the market surely would go higher. It does not appear as though much clover would come from abroad, and still some might dribble in.

DUTY RAISED ON TOW OF FLAX

Because of many complaints received the U. S. Treasury Department has directed the Collector of Customs at New York to admit tow of flax into this country at the rate of \$20 per ton. Representations were made to the department that the Board of General Appraisers had rendered a decision that this product should be admitted under the classification of flax straw, on which the duty is \$5 per ton.

It was contended that tow of flax was partly manufactured and should be assessed at the higher rate of duty and the department has indicated a readiness to yield in the matter until the customs court has had an opportunity to pass on the classification.

HAY AND STRAW

C. C. Connolly has opened a feed store in Cullman, Ala., under the firm name of C. C. Connolly & Co.

Work is progressing on the hay warehouse of the Taylor Grain and Elevator Company at Corpus Christi, Texas.

Walter Jenkins will erect a feed warehouse, 60x100 feet in size, at Alliance, Ohio, and the store will be known as Jenkin's Cash Feed Store.

Ernst H. Kuhlmann, hay and grain dealer at St. Louis, Mo., has purchased a lot on which he will erect buildings at a cost of \$7,000.

Galbraith, Bacon & Co., of Seattle, Wash., have been awarded a Federal contract for nearly 10,000 tons of hay and the orders are being filled now.

The Senate of the twelfth Idaho Legislature recently went on record protesting against the quarantine placed on Idaho alfalfa by the state of California.

C. M. Norton has sold his feed and implement store at Garrettsville, Ohio, to his son, D. O. Norton, and P. E. Nelson, who will take over the business during the next six months.

The Rock Island Railroad will operate a Kaffir corn special demonstration train over its lines in Texas during this month, it is said. The proposed route will cover about 600 miles.

It is reported that a record price for hay was made in the Brazeau mining district in Alberta, Canada, recently. The hay is taken to the mines on pack ponies and it costs \$150 per ton to deliver the goods.

All the officers of the Porterville Alfalfa Company were re-elected at a recent meeting at Porterville, Cal. New buildings are planned for the company's ranch, including comfortable accommodations for employes.

George E. Van Vorst, Inc., has been incorporated at New York City, with a capital stock of \$100,000, to deal in hay, cattle, grain, feed, etc. The incorporators are Thomas F. Collins, James M. Shelley and Herbert M. Simon.

Somers & Co. have incorporated at San Francisco, Cal., with a capital stock of \$200,000, to engage in the hay and feed business. The incorporators are Harvey C. Somers, Frank A. Somers, Roy J. Somers and Harry Stokes.

The New York Hay Exchange Association has filed a complaint with the Interstate Commerce Commission against the Lehigh Valley Railroad in connection with an embargo against Pier 66 and Brooklyn Eastern District Terminal. The association contends that shipments in transit consigned

to New York or Jersey City lighterage free should not be restricted.

The Kerr Grain and Hay Company has been incorporated at Melvin, Mich., with a capital stock of \$25,000.

The Gerosa & Lo Monte Company, Inc., has been incorporated at New York City, to deal in hay, grain, etc. The capitalization is \$5,000 and the incorporators are Antonio Gerosa, Fortunato Lo Monte and Angelo Gagliano.

In an endeavor to protect the alfalfa crops of Beaver County, Utah, from the alfalfa weevil, the commissioners have asked the State Horticultural Commission to establish a quarantine against the counties in Utah infested with the pest.

A. W. Peterson, superintendent of the Government field station at Yuma, Ariz., has been elected superintendent of the new Federal experiment station to be located at that point for the development of grains and grasses for semi-arid sections of the United States.

The Alfalfa Corporation of Virginia has been incorporated at Richmond, Va., with a capital stock of \$100,000, to develop alfalfa lands. The officers are: J. E. Cuthbert of Petersburg, Va., president; G. E. Murrell, vice-president, and E. S. Evans of Richmond, secretary.

MARKETS USING STANDARD GRADING RULES FOR HAY

The following markets have adopted the grading rules of the National Hay Association for hay and straw:

Toledo Produce Exchange, Toledo, Ohio; Board of Trade, Tampa, Fla.; Board of Trade, Louisville, Ky.; Chamber of Commerce, Cincinnati, Ohio; New York Hay Exchange Association, New York City; Grain Exchange, Savannah, Ga.; Chamber of Commerce, Baltimore, Md.; Chamber of Commerce, Cleveland, Ohio; Board of Trade, Indianapolis, Ind.; Grain Exchange, Nashville, Tenn.; Board of Trade, Norfolk, Va.; Atlanta Grain Dealers' Association, Atlanta, Ga.; Chamber of Commerce, Columbus, Ohio.

Those markets using grades in part only are: Merchants' Exchange, St. Louis, Mo.; State of Minnesota; Hay & Grain Exchange, Pittsburgh, Pa.; Chamber of Commerce, Milwaukee, Wis.; Board of Trade, Chicago, Ill.; Commercial Exchange, Philadelphia, Pa.; Board of Trade, Jacksonville, Fla.; Merchants' Exchange, Memphis, Tenn.

warehouse at Colfax, and the Pacific Coast Elevator Company's warehouse at Glenwoods.

The Miller feed and implement store at Harbor Springs, Mich., was destroyed by fire on February 1. The property was owned by John Starr who carried a partial insurance.

The hay warehouse of Tierney & Co. at St. Paul, Minn., was destroyed by fire, entailing a loss of approximately \$10,000. There is about \$9,000 insurance. Four horses were consumed.

The Kerr-Gifford Company's warehouse at Pullman, Wash., was crushed under a weight of snow on January 21. The house contained about 20,000 bushels, and it is a complete wreck.

The malt warehouse of the Baltimore Distilling Company at Baltimore, Md., was damaged by fire on January 22, the loss being estimated at \$10,000. The house contained 350 bushels of malt.

A warehouse at Waverly, Wash., owned by the Northern Grain Company, suddenly collapsed under a burden of snow on January 23. The house was empty, as it had been vacated owing to the danger.

The malt house of Kreiner & Lehr at Buffalo, N. Y., was damaged by fire last month, to the extent of \$18,000. It is believed to have been caused by an overheated drying kiln. The loss is covered by insurance.

A gas tank, containing about 40 gallons of oil, exploded in the elevator at Hancock, Iowa, but the blaze was extinguished before much damage was done. The house is owned by Wright & McSweeney of Des Moines, Iowa.

The grain warehouse at Peck, Idaho, owned and operated by the Farmers' Union, collapsed owing to snow on the roof, and is almost a complete loss. The building was 32x90 feet in size, and the damage was estimated at \$700.

The elevator of the Halstead Mill and Elevator Company at Halstead, Kan., containing about 50,000 bushels of wheat, was burned on January 29. The wheat was valued at \$40,000 and the building at \$30,000. The plant will be rebuilt at once.

The elevator at Jerseyville, Ill., owned by Fred and Ross Chappell, burned recently. Sparks from a passing engine are believed to have ignited the house. It contained a quantity of wheat and corn. There was \$2,000 insurance on the contents.

The old elevator at Hovey, near Griffin, Ind., recently collapsed, owing to the undermining of the foundation by high water. The building had been repaired for use as a corn crib and contained about 12,000 bushels of corn, owned by A. Waller & Co.

Fire of unknown origin destroyed the plant of the Bowden-Snyder Company at Mansfield, Ohio, on February 1. The blaze started on the second floor and burned for some time before discovered. The loss was about \$16,000 and the insurance \$9,000.

The warehouse of the Farmers' Union Grain and Supply Company at Latah, Wash., collapsed under a heavy fall of snow on January 25 and is a total wreck. There was no loss to the contents, as they had been removed when the danger was apprehended.

The mill and elevator at Napoleon, Ohio, owned by J. H. Vocke & Son, were totally destroyed by fire on February 5. The elevator was almost full of grain. The loss is covered by insurance. The fire is supposed to have been caused by a hot journal in the elevator.

Christian Anderson, an employe in the plant of the St. Anthony Milling and Elevator Company at St. Anthony, Idaho, was caught up by the shafting while oiling the machinery near the top of the elevator and instantly killed. He leaves a wife and one child.

The Occident and the Anchor elevators at Munich, N. D., were destroyed by fire. The houses are located about 300 feet apart and, as the fires started simultaneously, they are believed to have been of incendiary origin. Each elevator contained about 10,000 bushels of grain.

Barney Wiebold, a carpenter, was seriously injured while engaged in repairing the elevator at Chesterville, Ill., on January 30. While hoisting heavy timber to the top of the building, one of the pieces became displaced and fell a distance of 20 feet, striking him on the head.

After smoldering for hours, J. A. Simpson's elevator at Woodford, Ill., burst into flames on January 19 and was soon consumed. The house contained about 100,000 bushels of oats, and the loss on elevator and contents will approximate \$20,000. Spontaneous combustion was the probable cause.

Fire, believed to have been of incendiary origin, damaged the hay, grain and feed warehouse of Pearson & Herron at 4734-36 West Kinzie street in Chicago, on January 17, causing a loss of \$150,000. Dust explosions destroyed a part of the building and added to the peril of the firemen. A recent consignment of axle grease, stored in the rear of the building, made it almost impossible to extinguish the flames. The building was a two-story brick structure with a frontage of 200 feet.

FIRES-CASUALTIES

The Occident Elevator Company at Douglas, N. D., suffered a small loss by fire on January 26.

The elevator of the Lake of the Woods Milling Company at McLean, Sask., was destroyed by fire.

The Lockwood Elevator at Ames, Iowa, was damaged by fire to the extent of about \$200 recently.

The elevator of the Alton Grain Company at Nevada, Ill., was slightly damaged by fire on February 3.

The Sherwood Farmers' Elevator Company at Sherwood, N. D., suffered a small loss by fire on February 4.

The Andrews Elevator at Elliott, N. D., was destroyed by fire recently. The loss was partially covered by insurance.

The elevator of the Durbin Farmers' Elevator Company at Durbin, N. D., was somewhat damaged by fire on February 5.

G. W. Wright, engineer in the Shellabarger Elevator at Osprey, Ill., had his hand badly injured by getting in contact with the governor.

The elevator at Wild Horse, Colo., owned by C. C. Higgins, was burned on January 21, entailing a loss of \$5,000, partially covered by insurance.

The new elevator at Riverview, Mont., operated by John P. Meadors, was burned on January 26. The stock on hand included 5,000 bushels of flax and between 1,000 and 2,000 bushels of oats and

wheat. It is believed that the fire was of incendiary origin.

The warehouse and elevator of Newton W. Dibble and Henry R. Lay at Holcomb, N. Y., was destroyed by fire, causing a loss of about \$12,000, with insurance \$8,000.

The grain and feed warehouse of E. B. Fritz & Son at Quarryville, Pa., was totally destroyed by fire on January 27. The loss was \$12,000, with insurance, \$9,000.

G. W. Weddle of Cisco, Ill., was killed in the elevator at that place recently. He was alone when he met his death, and when his body was discovered it was badly mangled.

The Independence Elevator at Elliott, N. D., was totally destroyed by fire. About 2,000 bushels of barley were stored in the house. The loss is fully covered by insurance.

The warehouse at Kenova, Wash., owned by the Leitch Warehouse and Grain Company, collapsed under a burden of snow on January 20. Some grain was damaged and the loss on the building is about \$1,200.

Four grain warehouses in Palouse County, Wash., collapsed under weights of snow during the latter part of January. They were the warehouse at Chambers, owned by Mark P. Miller, the Kerr-Gifford warehouse at Kitzmiller, the Farmers' Union

PERSONAL

Wilmer Young is in charge of the Occident Elevator at Heaton, N. D.

Lowell Sudduth, son of Thomas Sudduth, has taken charge of his father's elevator at Vanwood, Ill.

James A. Patten, former "wheat king" on the Chicago Board of Trade, has recovered from his recent illness.

Charles Fairfield has been elected president of the Fisher Farmers' Grain and Coal Company at Fisher, Ill.

George Wemmering has succeeded P. W. Bemis as manager of the Farmers' Elevator and Supply Company at Watertown, S. D.

Fred W. Jaeger, of J. F. Zahm & Co., grain dealers, Toledo, Ohio, and wife are spending a vacation trip in the South and in California.

H. N. Tucker of Courtenay, N. D., has been engaged as general buyer for the Independent Grain Exchange of Minneapolis, Minn.

W. C. Brokaw has been selected to succeed J. M. Ennes as manager of the Dole elevators at Princeton, Zeoring, Clarion and Meriden, Ill.

The estate of the late W. H. Moorehouse, of W. H. Moorehouse & Co., dealers in grains and seeds at Toledo, Ohio, has been appraised at \$111,000.

E. E. Derrough has resigned his position as manager of the Sidney Grain Company at Sidney, Ill., and has gone to Hot Springs, Ark., for his health.

Charles H. Lindner of the Valparaiso Elevator Company, Bucyrus, Ohio, recently slipped on an icy walk while at Rochester, N. Y., and broke his wrist.

H. S. Grimes of Portsmouth, Ohio, was re-elected president of the Ohio Grain Dealers' Insurance Company and also a director of the National Company.

H. S. Rolliford, a Chicago grain broker, is said to have been the only passenger on the Santa Fe De Luxe train on its weekly trip across the conti-

nent from Los Angeles, recently. The crew of 16 did their best to entertain the lonesome traveler.

R. F. Gunkelman has resigned his position as manager of the elevator at Twin Bridges, Mont., and he will be succeeded by a Mr. May of Minneapolis.

The employees of the Speltz Grain and Coal Company at Albert Lea, Minn., recently presented Theo. and Arthur Speltz, each, with a fine leather-upholstered chair.

Ed. Roach of the Farmers' Elevator at Monticello, Ind., has resigned his position, and will remove to Delphi, Ind., where he will take charge of the Kerlin Elevator.

George T. McCabe of Los Angeles, Cal., has been elected permanent secretary of the Stanislaus County Board of Trade and has entered upon his duties at Modesto.

I. A. Mabry, formerly of the Crouch-Mabry Grain Company of Fort Worth, Texas, has accepted a traveling position with the Bert K. Smith Grain Company of Fort Worth.

Axel Anderson has resigned his position as wheat buyer at the Hammer-Halvorson-Beier Elevator at Cooperstown, N. D., and he has been succeeded by Bert Lowry of Carrington, N. D.

A. McMichael of the Turner Grain Company, Winnipeg, Can., recently celebrated his golden wedding, on which occasion his friends in the grain trade presented him with a gold-headed cane.

L. W. Kattman, recent treasurer of the Betjen-Kattman Company, having elevators at New Knoxville and Moulton, Ohio, pleaded not guilty to an indictment charging him with embezzlement, recently.

Frank M. Bunch, ex-president of the Chicago Board of Trade, who has been connected with the firm of Rumsey & Co. since 1894, has announced his retirement from the firm and he will engage in business on his own account.

OBITUARY

James Bell, well-known grain dealer of David City, Neb., died of acute pneumonia in January.

Stacy B. Hart, head of the Hart Grain Weigher Company, Peoria, Ill., dropped dead on January 30.

The death of Clesson B. Phillips, a member of the Chamber of Commerce at Milwaukee, Wis., occurred in that city on January 15.

J. I. Brown, elevator inspector for the Minneapolis Chamber of Commerce, died of pneumonia on January 27. Mr. Brown was 61 years old and had been ill only a few days.

William F. Parr, formerly engaged in the grain and insurance business, died in Baltimore, Md., last month. He was 56 years old, and a brother of Harry A. and Charles E. Parr.

Henry C. Hayward, grain and wool merchant, died recently at Morenci, Mich., at the age of 92 years. Death followed a fall on an icy sidewalk several weeks previous. One granddaughter survives him.

John O'Hern, 75 years of age, died at his home in Chicago, on January 29. He had been engaged in the hay and feed business for 40 years, and for about 30 years he had supplied the Chicago fire department with hay and feed. One daughter survives him.

James E. Robinson suddenly died at Dorchester, Mass., in the courthouse, where he had been listening to a case. He was 52 years of age, and had conducted a hay and grain establishment at Dorchester for 25 years. He is survived by his mother and a brother.

William A. Black passed away at his home in Providence, R. I., on January 20, following an illness from a complication of diseases. Mr. Black was born in New Hampshire in 1857, and in 1874 he removed to Providence. In 1888, in partnership with John D. Peck, he took over the hay and grain business formerly conducted by the late Gov. John W. Davis. Mr. Black retired from the business

last spring and established a similar business at Summit, R. I. His wife, two daughters and a brother survive him.

Harry Hall, an attache of the secretary's office in the Board of Trade at Chicago, died recently from an aggravated case of pneumonia, aged 36 years. He had been connected with the Board of Trade for several years and was greatly loved.

William Penn Stroud collapsed on the lawn of his home in Pittsburgh, Pa., recently, and died before medical assistance could reach him. Mr. Stroud was 75 years old and his death came as a result of heart trouble. In 1868, he engaged in the flour and feed business at Roxborough, Pa.

General Hubbard, ex-governor of Minnesota, suddenly died at his home in Minneapolis on February 5th. He was engaged in the grain and milling business at Red Wing, Minn., in 1866. During his administration as governor, he advocated the establishment of state grain inspection.

James McAuliffe, who had been employed with the grain firm of Smith, Northam & Co. at Hartford, Conn., for 44 years, passed away at his home in that city on January 15, following a long illness. Mr. McAuliffe began work with the firm in 1868 and was retired on a pension in January, 1911.

C. B. Lennon, grain dealer, passed away at his home in Decorah, Iowa, on January 19, following a brief illness. Mr. Lennon was born in Racine, Wis., in 1852, and he had been engaged in the grain, coal and live stock business in Decorah for the last 30 years. He is survived by five sisters and a brother.

S. B. White, well known grain man of New York and Chicago, passed away in the former city in January. "Deacon" White was affiliated with the Plymouth Church in Brooklyn, N. Y., and his word was as good in Wall and La Salle streets as his bond. He failed in Chicago in 1891 for several million dollars, but he paid fifty cents on the dollar, gave his note for a like amount, and on New Year's

Eve, 1893, he paid off his outstanding indebtedness and added interest at the rate of five per cent. The failure was the famous "white corn" failure.

Hunter Brooke, senior member of the wholesale grain firm of Brook & Pennock, Philadelphia, Pa., died on January 31, following an operation. He was 70 years old, and has long been prominent in the business and social circles of Philadelphia. He leaves his wife and two daughters. An account of his career appears elsewhere in this issue.

James Hughes, pioneer grain and feed man, died at his home in Brooklyn, N. Y., after a brief illness from pneumonia. Mr. Hughes engaged in the grain and feed business in 1860, continuing in the trade until his death. He was born in Ireland 72 years ago and came to this country when a boy. He is survived by his widow, two sons and four daughters.

Daniel McAlister died at his home, Columbus, Ohio, February 5th. Mr. McAlister was seventy-six years old and for some years back had not been in active business, but previous to his retirement he was a prominent figure in the grain trade. He was a charter member of the Ohio Grain Dealers' Association and was well and favorably known not only by Ohio dealers but throughout the trade generally.

Guy N. Foster, an employe of the Alberta-Pacific Grain Company at Sedgwick, Alta., was killed by a train on January 20. Mr. Foster was born in 1879 at Randolph, Minn., where he grew to manhood. In 1904, with his uncle, A. L. Foster, he entered the grain business at Souris, N. D., and later he continued in the business at Lethbridge and at Killam, Alta. In November of last year he entered the employ of the Alberta-Pacific Grain Company. He is survived by his wife, father and mother, one brother and six sisters.

MILLERS' MUTUAL FIRE INSURANCE
ASSOCIATION OF ILLINOIS

The thirty-sixth annual report of the Millers' Mutual Fire Insurance Association of Illinois has recently been issued by Secretary G. A. McKinney, showing the financial condition of the company to be as follows:

ASSETS.		
	Par value.	Market value.
School bonds	\$129,000.00	\$ 133,448.90
Municipal bonds	156,000.00	157,433.00
County bonds	5,000.00	4,853.50
Railroad bonds	85,000.00	73,830.00
General improvement bonds	16,800.00	16,979.10
Special road bonds	9,000.00	9,262.80
Total bonds	\$400,800.00	\$ 395,807.30
Real Estate		5,000.00
Premiums and assessments unpaid		10,145.23
Interest accrued		6,876.57
Checks and drafts in office		64.79
Cash in banks		55,360.02
Total cash assets		\$ 473,253.91
Deposit notes, net value		1,624,827.99
Total gross assets		\$2,098,081.90

LIABILITIES.		
Losses in process of adjustment, or in suspense	\$	9,802.36
Losses adjusted, but not yet due		None
Total unpaid losses	\$	9,802.36
Reserve for taxes and unpaid premiums		4,836.11
Reserve for re-insurance		137,947.44
Total liabilities	\$	152,585.91

SURPLUS.		
Gross surplus to policy holders	\$	2,083,443.43
Net value of premium notes (deducted)		1,624,827.99
Cash surplus	\$	458,615.44
Deduct re-insurance reserve		137,947.44
Net surplus over all liabilities	\$	320,668.00

GENERAL INFORMATION.		
Losses incurred during the year	\$	153,002.55
Losses paid during the year, less salvage		162,382.74
Losses paid since organization		2,132,156.09
Amount of insurance in force		18,433,615.45
Face value of notes	\$	2,341,883.98

INCOME AND LOSS EXHIBIT.		
Class	Income	Losses
Mills	\$136,270.67	\$ 46,426.18
Elevators	167,734.89	102,896.77
General Risks	10,755.86	3,679.60
Total	\$214,761.42	\$153,002.55

NOTE:—In addition to the above 'income for premiums and assessments, there was an additional income from interest, commission, salvage and other sources, of \$32,144.26.

	1911	1912
Ratio of expense to premiums and assessments	18.8	17.7
Ratio of expense to income	17.4	13.1
Assessment in 1912 forty (40) per cent, making a saving to policy holders of 60 per cent of their basis rate.		

GRAIN TRADE PATENTS

Issued on January 14, 1913

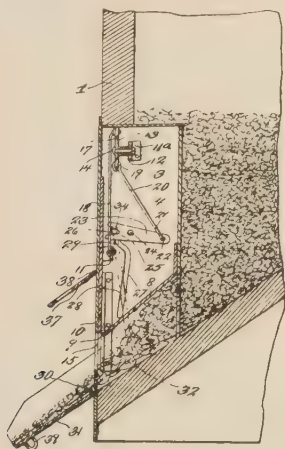
Conveyor.—Oliver S. Riblet, Erie, Pa., Filed Feb. 24, 1912. No. 1,050,171.

Conveyor Belt.—Thomas A. Bennett, Akron, Ohio, assignor by mesne assignments to the B. F. Goodrich Company. Filed June 18, 1910. No. 1,050,603.

Issued on January 21, 1913

Grain Chute.—Clyde L. Neiswanger, Bladen, Neb. Filed August 24, 1912. No. 1,050,683. See cut.

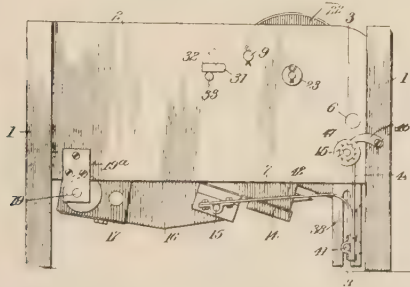
Claim.—In combination, a chute having an opening, a door therefor, a spout hinged to the chute and provided with an extension, a rod connected to the extension and provided with a lateral portion, the chute having an elongated slot terminating at



its upper portion in a curved cam slot, said slots receiving the lateral portion of the rod, a lever pivoted in the chute and constructed with an angular slot at one end adapted to receive the lateral portion of the rod when the hinged spout is lowered, and means connected between the lever and the door whereby the door is opened or closed as the spout is lowered or raised.

Grain Separator.—David W. Stahl, Snyder County, Pa. Filed May 13, 1910. No. 1,051,027. See cut.

Claim.—In a grain separator, a frame, a chute supported thereby and adapted to receive the grain, a swinging screen disposed below the chute, a pair

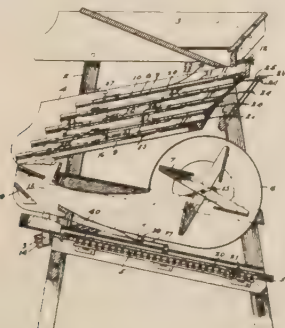


of arms pivoted at one end to the frame, means for attaching one end of said screen to said arms, driving means connected with said arms, oscillating said screen, and means for shifting the point of connection of such driving means relative to the pivot point of said arms, whereby their throw may be correspondingly varied.

Grain Separator.—Robert J. Owens, Minneapolis, Minn. Filed September 16, 1912. No. 1,051,157.

Grain Separator.—Robert J. Owens, Minneapolis, Minn. Filed September 23, 1912. No. 1,051,158. See cut.

Claim.—The combination, in a grain separator, with a series of superimposed sieves, and means for longitudinally reciprocating said sieves, of a series of cleaner bars resting upon said sieves and extend-



ing longitudinally thereof, means connecting the bars on each sieve and thereby forming a grid, means for maintaining the upper surfaces of the sieves and the under surfaces of the cleaner bars in parallel planes and means for reciprocating said

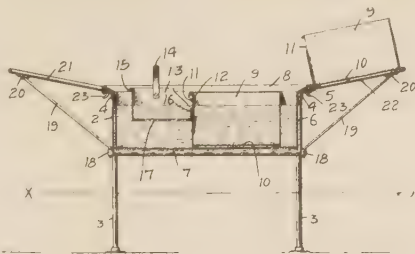
bars transversely to the line of reciprocation of said sieves.

Apparatus for the Germination of Grain for Malt-making.—Peter Chodounsky, Bezdekov, Austria-Hungary. Filed June 13, 1912. No. 1,051,196.

Issued on January 28, 1913

Seed Cleaning Machine.—Budd Reeve, Buxton, N. D. Filed July 29, 1912. No. 1,051,635. See cut.

Claim.—A seed cleaning machine comprising a tank adapted to contain a supply of water, a seed box fitting within said tank and having a perforated bottom, and a recess in the upper portion of its wall, the weed seeds and the light, imperfect kernels rising to the top of the water in said box, a



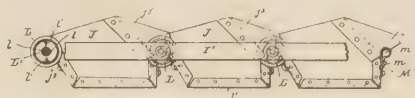
bucket also having a perforated bottom fitting within said tank and having a wall adjacent to said box below the level of the water in said box, the wall of said box adjacent to the low wall of said bucket having a removable slide normally closing said recess, said slide being adapted for use as a skimmer to direct the refuse material floating on the surface of the water from said box into said bucket.

Grain Car Door.—Frank C. Reynolds, Sterling, Colo. Filed Jan. 22, 1912. No. 1,051,762.

Issued on February 4, 1913

Grain Door.—Walter J. Milloway, Larned, Kan. Filed May 8, 1912. No. 1,051,965.

Conveyor.—George C. Horst, Columbus, Ohio, assignor to Joseph A. Jeffrey, Columbus, Ohio, May 14, 1903. No. 1,052,253. See cut.

Claim.—In a conveyor, a series of buckets each formed to have the end wall j^2 , the bottom j^1 , theend wall j^2 , the inclined wall j^4 , the hinge element M adjacent to the wall j^2 , and the hinge element M' outside of the walls j^4 and j^2 , substantially as set forth.

PRICES OF AGRICULTURAL PRODUCTS

The average of prices received by producers of the United States for staple crops increased 1.5 per cent from January 1st to February 1st, which compares with an increase of 4.7 per cent in the same period a year ago and an average increase of 2.6 per cent during January of the past five years. On February 1st prices of staple crops averaged about 19.7 per cent lower than on like dates of 1912, 6.0 per cent lower than in 1911, 18.7 per cent lower than in 1910, and 6.5 per cent lower than 1909, on like date.

The average prices received by producers of the United States for articles named, on dates indicated, according to reports made by correspondents of the Bureau of Statistics of the U. S. Department of Agriculture were as follows:

	Feb. 1 1913	Jan. 1 1913	Feb. 1 1912	Jan. 1 1912	Feb. 1 1911	Feb. 1 1910
Corn per bu....	\$ 0.506	\$ 0.489	\$ 0.646	\$ 0.490	\$ 0.652	
Wheat per bu....	.799	.762	.904	.898	1.050	
Oats per bu....	.324	.322	.475	.331	.450	
Barley per bu....	.514	.499	.912	.641	.593	
Rye per bu....	.689	.638	.844	.731	.761	
Buckw't per bu....	.694	.668	.736	.644	.720	
Flax's'd per bu....	1.062	1.062	1.908	2.339	1.929	
Hay per ton....	11.640	11.860	15.440	12.200	12.350	
	Jan. 15 1913	Dec. 15 1912	Jan. 15 1912	Jan. 15 1911	Jan. 15 1910	
Beans per bu....	2.26	2.30	2.38	2.20	2.23	
Clv'r s'd per bu....	9.41	9.00	10.89	8.27	8.26	
Timo'y per bu....	1.79	1.79	6.99	4.12	.....
Alfalfa per bu....	7.66	7.86	.....	.....	.....

NEW METHOD OF ALLOTING PRISON-MADE BAGS

According to custom, the allotment of prison-made grain bags was made to various applicants at the state penitentiary in Walla Walla, Wash., on January 21. The bags were apportioned to the various counties of the state and there was a big rush to secure the bags, which were sold at a cent under the market price.

The fact, however, that two men who stood in the office of the superintendent of the jute mill at the penitentiary for the whole night previous, and ordered for themselves and their neighbors the entire 307,000 grain bags allotted to that county, proved to the State Board of Control that there was a radical defect in this plan of apportionment and

that body canceled all sales of bags that have been made under the old plan of application.

The following provisions for the reallocation and sale of this season's output were made in the form of a resolution adopted by the board:

Applications shall be made during the month of February; only actual producers of grain may apply for bags, and such must file affidavits of the grain produced last season and an estimate of this year's crop; should the applications in a given county exceed the allotment, the available number will be pro-rated among all the applicants.

The only "girl farmer" in Ohio to be included in the recent trip of young corn growers to Washington, was Mary Whitacre, of Marrow. Miss Whitacre, who is fourteen years old, also won a prize in a corn growing contest in Warren County, raising 76 bushels of corn on one acre.

For Sale

[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

ELEVATORS AND MILLS

FOUR ELEVATORS FOR SALE

Located in best grain territory, northern Oklahoma. All up-to-date; will bear close inspection. BOX 866, Blackwell, Okla.

HOW TO SELL YOUR ELEVATOR.

If you wish to sell your elevator promptly and quietly, write me, giving all the information. Must be worth the money. JAMES M. MAGUIRE, Campus, Ill.

ELEVATORS FOR SALE

Have a nice lot to select from at prices from \$3,000 up. Write and let me know how much you wish to pay. Am sure I can suit. JAMES M. MAGUIRE, Campus, Ill.

FOR SALE OR TRADE

For farm or ranch lands, West or South preferred, the best 400-barrel mill in the state of Oklahoma. We have the wheat, the oil and the gas. Located in a town of 30,000 people. Nearest competitive mill is 90 miles. For full description, write R. E. VAUGHN, Tulsa, Okla.

FINE TERMINAL PLANT FOR SALE

Grain Elevator property for sale at Harvey, Ill., on Grand Trunk Railroad. Description: 10 fire-proof storage tanks, capacity 250,000 bushels; bleaching tower; boiler house and boiler; office; motors; machinery; electric switches; concrete foundation for working house, etc. Direct and belt connections with all railroads. Address H. W. ROGERS & BRO., Western Union Bldg., Chicago, Ill.

FLOUR AND FEED MILL FOR SALE

A 50-barrel steam roller mill in good wheat and dairy country. Mill in good condition and equipped with modern machinery. Located in southern Indiana in fine town; good schools and churches. Have fine trade established. Will sell two-story house in connection, if desired. Excellent opportunity for some one. Write for full information. INDIANA, Box 1, care "American Elevator and Grain Trade," Chicago, Ill.

ELEVATOR FOR SALE

Capacity, 40,000 bushels small grain, 8,000 bushels ear corn; size of elevator cups, 7x14; six dumper; 1,500-bushels per hour cleaner; 1,000-bushels per hour corn sheller; 10-ton Fairbanks scale; 35-horse power gasoline engine. This elevator is nearly new and is a one-man elevator in a fine agricultural country where you can handle a carload of grain a day. For particulars address C. G. WILLIAMSON, 725 Reibold Bldg., Dayton, Ohio.

ELEVATORS AND MILLS

MUST SELL TO CLOSE ESTATE

A 10,000-bushel modern elevator, not two years old. Capacity easily doubled, if desired. Rich wheat country; big flour business; seed, feed, fuel and good side lines. On Wabash R. R. in Missouri. MODERN ELEVATOR, Box 2. care "American Elevator and Grain Trade," Chicago, Ill.

ADMINISTRATOR SALE

The Burdick Potter Elevator property, located at Fenton, Genesee Co., Mich., consisting of elevator building, brick warehouse, hay barn, coal sheds, also large modern residence and brick store, will be sold at auction to the highest bidder, February 15, 1913, at 10 o'clock a. m. For particulars write A. W. CIMMER, Administrator, Fenton, Mich.

FOR SALE

Controlling interest in a mill and elevator company. Sixty-five barrel Allis-Chalmers mill. Always sufficient wheat from farmers' wagons; local sale for feed and flour. Four grain elevators on the C. & O. of Ind. R. R. (located in Ohio and Indiana). Splendid grain country; side lines pay operating expenses. Mill and elevators connected by private telephone lines. Dividends on common stock have averaged 10 per cent. Buyer can command salary equal to 10 per cent on price of stock. Cash \$10,000 or more, balance promissory note. Owner is ill and non-resident and must sell. S. E. WILLEY, Station L., Cincinnati, Ohio.

MACHINERY

A SNAP

Six-horse gasoline engine, nearly new; two-horse gasoline engine, new; jetting tools, nearly new. E. W. EATON, Bowbells, N. Dak.

FOR SALE AT A BARGAIN

Two 35-horsepower and one 15-horsepower St. Mary's Gasoline Engines. HENRY F. STUEBE, 2111 College Ave., St. Louis, Mo.

FOR SALE

One 25-horsepower, Otto Gasoline Engine, in good running order. Price, with battery ignition, \$350; magneto ignition, \$375. THOMPSON & SONS MFG. CO., Beloit, Wis.

Miscellaneous Notices

[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

FOR QUICK SALE

An 8,080-acre stock ranch for half its value. For further information, address the owner, A. J. JOHNSON, Merchants' National Bank Bldg., Springfield, Mo.

Printed Leadpencils and Penholders The "AD-GIFT" par excellence

500 Pencils, Rubber Tips, Fair Quality, \$10.00; 1000 for \$18.00
1000 Penholders, Cork Cores, \$15.00
Write for Samples and Prices

Dept. K H. O. & A. J. BARNES, Springfield, Ill.

Edward P. McKenna

John A. Rodgers

McKENNA & RODGERS COMMISSION MERCHANTS

Grain and Provisions, Shippers of Corn and Oats

61 Board of Trade, CHICAGO

Consignments given
Special Attention

Phone
Harrison 7228

Orders in Futures
carefully executed

MISCELLANEOUS NOTICE

BURLAP BAGS WANTED

All sizes of heavy bags for grain. Send samples and prices to THE RAYMOND P. LIPE CO., Toledo, Ohio.

TEXAS BARGAIN

A 900-acre stock farm on river. Best country home in this part of Texas. All or part; terms. M. H. FRANCIS, Anson, Tex.

WANTED

A position as manager of grain elevator. Have had 25 years' experience in flour mill and elevator. Am thoroughly competent in any capacity. BOX 121, Elwood, Ind.

FOR SALE

Citrus fruit and agricultural land on gulf coast. Healthiest place in Florida. Thirty dollars an acre. Easy terms. Free literature. Investigate. PORT RICHEY COMPANY, Tampa, Florida.

FOR SALE

Irrigated farm, 175 acres, with first-class water right, well improved. Four and one-half miles pig-tight fence. Fifty-five acres alfalfa, balance plowed. Terms easy. E. J. BISHOP, Owner, Mesita, Colo.

CHOLERA PROOF HOGS

I have more than 5,700 swine on my farm and am selling grade Yorkshire, Tamworth, Poland-China and Duroc brood sows, boars and shoats in any quantity at best Buffalo market price for fat Yorkers on day of sale. Sows to farrow soon included. These hogs are not fat, are cholera proof and prolific breeders. Pigs that are six to ten weeks old at \$3 to \$4. ALVAH BROWN'S PIG FARM, Grand Rapids, Mich.

Grain and Seeds

OATS STRAW WANTED

Wanted, 100 cars oats straw. C. T. HAMILTON, New Castle, Pa.

WANTED FIELD SEEDS

All varieties. Quote with samples. J. OLIVER JOHNSON, Chicago, Ill.

FOR SALE

Alfalfa seeds, highest grades; also red clover and timothy seeds. Write us. C. A. SMURTHWAITE GRAIN & MILLING COMPANY, Salt Lake City, Utah.

1913

The Wagner Letters of 1913

will follow the crop raising season with advance reports. Your attention and business is requested. Correspond. Send for May 1913 wheat and corn circulars.

E. W. WAGNER & CO., 99 Board of Trade, CHICAGO

SEEDS

THE ALBERT DICKINSON CO.

DEALERS IN

GRASS SEEDS, CLOVERS, FLAX SEED, LAWN GRASS, BEANS, PEAS, POPCORN, BIRD SEEDS, BUCKWHEAT, BAGS, ETC
CHICAGO, Ill. Branch: Minneapolis, Minn.

"Ratekin's Seed Corn"

Oldest established and largest wholesale and contract seed corn growers in the United States. Have made this a specialty for over thirty years. We grow all the leading, standard and best varieties of field, Dent, Flint and Sweet sugar corn for wholesale trade. Write or wire us for prices and quotations for immediate or future shipments, also contract prices for 1913, stating probable quantities of different varieties, etc., etc.

Ratekin's Seed House,

Shenandoah, Iowa

GRAIN AND SEEDS

GRAIN FOR SALE

Cane seed and kaffir corn. We are contracting sales on new crop now. Get our prices. F. G. OLSON, Mgr. Grain Dept., O. W. Cox, Woodward, Okla.

BUCKWHEAT WANTED

We are in the market for buckwheat in any quantity; car lots and less. Mail sample and quote lowest price f. o. b. your station. H. J. KLINGLER & CO., Butler, Pa.

CHICKEN GRAIN WANTED

Mail samples and quote car lots off-grade wheat, rye, barley, millet, kaffir, milo and cane seed. STRATTON & RUSSELL, Wholesale Grain and Commission, Memphis, Tenn.

FLOUR AND MILL FEEDS

Mixed cars of flour and mill feeds in 100-pound sacks are our specialties. Would like to send you a trial order to convince you of the superiority of our products. ANSTED & BURK CO., Springfield, Ohio.

WANTED, RED CLOVER

*Alsyke, Timothy, Mixed
Alyske and Timothy, etc.*

Send Samples Stating quality.

THE ADAMS SEED COMPANY, Box 91 Decorah, Iowa

SEEDS WANTED

We solicit correspondence from shippers or dealers who are in position to offer us, or can secure for us, Timothy, Red, Alsike or Alfalfa, Clover, Millet, Red Top or other Field Seeds. Write us, with crop news, samples, and other information as to production of seed and approximate values in your section. Please refer to this advertisement.

ILLINOIS SEED CO.

1521-1535 Johnson St. CHICAGO, ILL.

ROOFING AND SIDING

SYKES STEEL ROOFING CO.

114 W. 19th Place, Chicago

MAKERS OF FIREPROOF WINDOWS

WE manufacture all gauges of corrugated iron, either painted or galvanized. We make Patent Cap Roofing, Roll Cap roofing, "V" Crimped Roofing, Metal Ceilings, etc., etc.

We make a specialty of

Corrugated Iron and Metal Roofing For Grain Elevators

And take contracts either for material alone or job completed
Write us for prices. We can save you money.

"Hydrite" The Colorless Waterproofing for Cement, Stucco, Brick and Plaster

Hydrite waterproofed successfully the Elevating and Receiving Pits of the huge C., I. & S. Ry. Elevator of 250,000 bushels capacity, at Schneider, Ind.

These pits are subjected to tremendous outside water pressure, but a plaster coating of **Hydrite** cement mortar made them absolutely watertight.

Hydrite is compounded on scientific principles. It is colorless and acid resisting. It will not deteriorate with age, neither is it affected by action of the sun or frost.

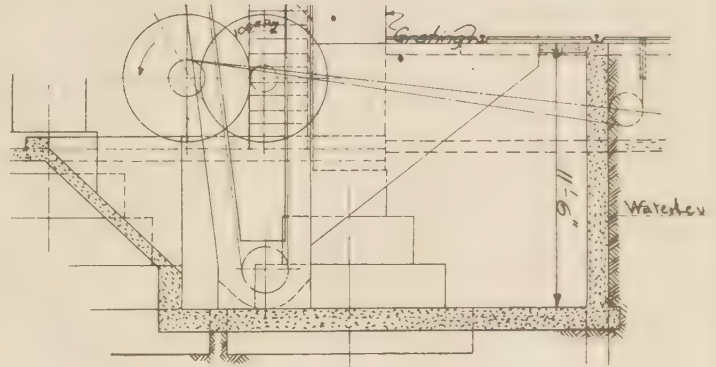
Hydrite when mixed with cement and sand in proper proportions will chemically combine with these materials making an insoluble water-resisting compound of lasting qualities heretofore never equaled.

Hydrite when applied to walls is very penetrating and combines with material of which the wall is built. It is insoluble in either hot or cold water.

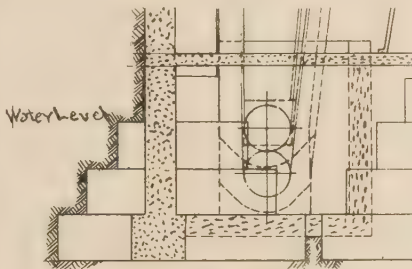
Hydrite will solve the problem of wet and damp elevator walls, bins, pits and basements which may be due to heavy water pressure, thereby eliminating heavy losses and damage of wet grain, rusty scales and machinery failure to operate elevator.

We are in a position to help you overcome the difficulties in connection with any water or damp proofing proposition that is confronting you, and will absolutely guarantee any work undertaken by us if executed under the superintendency of one of our experts. We can either figure on your waterproofing work complete applied or furnish the **Hydrite** and an expert to superintend the work.

Write us your needs and for our booklet on **Hydrite**, the wonderful discovery. It is free for the asking.



One of the Two Receiving Pits of the C., I. & S. Ry. Elevator



One of the Three Elevating Pits of the C., I. & S. Ry. Elevator

Waterproofing Co. of America

332 So. Michigan Blvd.

CHICAGO, ILLINOIS

Millers' Mutual Fire Insurance Association of Illinois

Established 1878

ALTON, ILLINOIS

Insurance of Flour Mills
and Elevator Properties

Grain Insurance for short
terms a specialty. : :

Cash Assets - \$473,253.91

G. A. McKINNEY, Sec'y



167 166 3480 202 123 660 0444 0753 951 110

NOVELTIES FOR ADVERTISING

No. 700



We have over 3000 Styles made of Metal, Leather, Celluloid, Paper and Wood. All made to carry your Ad.

The Most Extensive Assortment in the United States.

These goods are suitable for Conventions, Salesman Distribution and General Use.

Write for Assortment to Examine and return at our expense. Just give us an idea as to the price of article wanted as they range from 1c to \$12.00 each.

ALSCHULER
IMPORTER

607 SCHILLER BLDG. - CHICAGO

Pocket Books, Bill Folders, Desk Sets, Metal Boxes, Wallets, Penholders, Cigarette Cases, Key Chains, Letter Openers, Memo Books, Key Rings, Penholders, Etc.

GRAIN RECEIVERS

PHILADELPHIA

L. F. MILLER & SONS,
Receivers and Shippers of
GRAIN, FEED, SEEDS, HAY, ETC.
OFFICE: 2931 N. BROAD ST., PHILADELPHIA, PA.
CONSIGNMENTS SOLICITED. Special attention given to
the handling of CORN AND OATS.
REFERENCES: { Manufacturers' National Bank, Philadelphia, Pa.
Union National Bank, Westminster, Md.

E. E. DELP GRAIN CO.

GRAIN AND FEEDS

453 BOURSE PHILADELPHIA, PA.
ELEVATOR, TRANSFER HOUSE AND MILLS:
BOURBON, INDIANA

MILWAUKEE

O. MOHR, Mgr. G. C. HOLSTEIN, Sec'y-Treas.
Mohr-Holstein Commission Co.
29 Chamber of Commerce
MILWAUKEE
Sample Grain a Specialty
BRANCH OFFICES AT CHICAGO AND MINNEAPOLIS

OUR SPECIALTIES:
Malting Barley
Milling and Distilling Rye
FAGG & TAYLOR, Shippers
MILWAUKEE, WIS.

KANSAS CITY

R. J. THRESHER, Pres. L. A. FULLER, Sec'y
THRESHER-FULLER GRAIN CO.
Grain Commission Merchants
CONSIGNMENTS SOLICITED
Grain Bought and Sold for Future Delivery
311-14 Board of Trade KANSAS CITY, Mo.

DETROIT

A. S. DUMONT R. C. ROBERTS R. L. HUGHES
Dumont, Roberts & Co.
RECEIVERS GRAIN SHIPPERS
Chamber of Commerce
DETROIT, MICH. Merchants Exchange
DECATUR, ILL.
Consignments Solicited. Ask for our bids and quotations.

PEORIA

P. B. & C. C. MILES
Established 1875 Incorporated 1910
PEORIA, ILL.
Handling Grain on Commission
Our Specialty

A. G. TYNG, Jr. D. D. HALL
TYNG, HALL & CO.
Grain and Commission
Merchants
Rooms 33 and 35 Chamber of Commerce
PEORIA, ILLINOIS

C. W. Buckley. Thos. J. Pursley
Buckley, Pursley & Co.
COMMISSION MERCHANTS
GRAIN, HAY AND SEEDS
PEORIA, ILL.
References { First National Bank, Peoria, Ill.
Commercial German National Bank, Peoria, Ill.

W. W. Dewey & Sons
GRAIN COMMISSION
26 Chamber of Commerce, PEORIA, ILL.
Prompt personal attention given to
Consignments and orders for grain.

We Get Continuous Chicago Markets. Private Wires to all Points.
T. A. GRIER & CO.
Grain Shipping and Commission Merchants
We Furnish Bids on Grain to Arrive
and Also Solicit Consignments.
18-22 Chamber of Commerce, PEORIA, ILL.

RUMSEY, MOORE & CO.
GRAIN COMMISSION
Board of Trade Bldg. PEORIA, ILL.

LOUIS MUELLER L. L. GRUSS
MUELLER GRAIN CO.
RECEIVERS and SHIPPERS
GRAIN
We Solicit Your Consignments of Grain and Hay
ROOM 39 CHAMBER OF COMMERCE
PEORIA, ILLINOIS

SEEDS

Grain, Clover and Grass Seeds,
CHAS. E. PRUNTY,
7, 9 and 11 South Main St. SAINT LOUIS

NEW YORK CITY

L. W. FORBELL & CO.
Commission Merchants
342 Produce Exchange NEW YORK
Try us with consignments of oats and corn.
We are Specialists in these grains and
are strictly Commission Merchants.

BROOKLYN HAY & GRAIN CO.
HAY, STRAW AND GRAIN
COMMISSION MERCHANTS
ON ALL MARKETS IN NEW YORK HARBOR
Office: Borough of Brooklyn, New York

INDIANAPOLIS

The
Bassett Grain Co.
INDIANAPOLIS
Telephones 80 615-616 Board of Trade

The Mutual Grain Company
GRAIN COMMISSION
618 Board of Trade, INDIANAPOLIS, IND.
Careful attention to all shipments

ST. LOUIS

**"THE CONSIGNMENT HOUSE
OF ST. LOUIS"**
GRAIN, HAY & GRASS SEEDS
Picker & Beardsley Com. Co.
118 NORTH MAIN STREET.

Ship your Grain, Hay and Seeds to
John Mullally Commission Co.
ST. LOUIS, MO.
WE NEVER BUY—HANDLE ON
CONSIGNMENT ONLY

GRAIN RECEIVERS

TOLEDO

When "Seedy"

Try

C. A. KING & CO.

Toledo Leads World

"SEND IT TO ZAHM"

THAT Consignment of Wheat, Oats, Corn or Seed.
 THAT Order for Futures—Toledo or Chicago.
 TOLEDO is the real market for Red Clover,
 Alsike and Timothy futures.

J. F. ZAHM & CO.

TOLEDO (Here since 1879) OHIO

ASK FOR OUR DAILY RED LETTER—FREE

JOHN WICKENHISER & CO.

Wholesale Grain Dealers

TOLEDO, OHIO

We make track b'ds and quote delivered prices.
 Solicit consignments of Grain and Clover Seed.
 Members Toledo Produce Exchange and Chicago
 Board of Trade

The Oats Specialists

H. D. RADDATZ & CO.

GRAIN, SEEDS AND FUTURES

Always in the market to buy or sell. Ask for
our prices.Room 21, Produce Exchange
TOLEDO, OHIO

Spring Wheat for Distribution

Look for our quotations on both spring and winter
 wheat in connection with our market letter on the
 last page of the Toledo Daily Market Report. If
 not receiving, ask for it. We want you to have it.

SOUTHWORTH & COMPANY

GRAIN, SEEDS, PROVISIONS

36-37 Produce Exchange, Toledo, Ohio

Oats Are Our Specialty

The Paddock Hodge Co.

Receivers—TOLEDO—Shippers

OMAHA

CAVERS ELEVATOR CO.

OMAHA

Receivers and Shippers of Grain
SACKED CORN AND OATS

Members: Omaha Grain Exchange Chicago Board of Trade.

PITTSBURG

Sizing up Pittsburg Market?

THINK OF

H. G. MORGAN, "The Pittsburg**Hay Men"**

727-729 Grain Exchange, Pittsburg, Pa.

HAY—Ear Corn, Oats—HAY

IN THE ONE SPOT 45 YEARS

Daniel McCaffrey's Sons Co.

Leading Hay and Grain Dealers

Pittsburg - - - Pennsylvania

D. G. Stewart & Geidel

GRAIN, HAY and FEED

RYE A SPECIALTY

Office 1019 Liberty Street Pittsburg, Pa.

Proprietors Iron City Grain Elevator. Capacity 300,000 bu.

C. M. HARDMAN

D. V. HECK

HARDMAN & HECK

Receivers and Shippers of

GRAIN, HAY AND MILL FEED

IN CAR LOADS

Office: 723-725 Wabash Bldg., Pittsburg, Pa.

We buy direct or handle your grain on consignment. Our
 facilities are unequaled for handling your shipments
 satisfactorily in the Pittsburg market.

W. F. Heck & CompanyRECEIVERS AND SHIPPERS IN CAR LOTS
MIXED CARS OUR SPECIALTY

Grain, Hay, Straw and Mill Feed

Room 727, Wabash Bldg., Pittsburgh, Pa.

Members: National Hay Association and
 Pittsburg Grain and Flour Exchange Use Robinson's
 Code.

CRAWFORDSVILLE, Ind.

Crabbs Reynolds Taylor Company**CLOVER SEED**

Car Lot BUYERS of GRAIN

Crawfordsville

Indiana

LANCASTER

DO YOU REALIZE

That country trade always pays you
 best in every way?

We work a large country business.
 See the point?

JONAS F. EBY & SON,

LANCASTER, PA.

BUFFALO

Alder-Stofer Grain Co.

CONSIGNMENTS A SPECIALTY

Buffalo, N. Y.

The permanent success of our business depends on
 our customers' continued satisfaction. Our busi-
 ness has been established forty years.

L. S. CHURCHILL, President
G. W. BARTLETT, Treasurer**The Churchill Grain & Seed Co.**

Commission Orders Executed. Grain and Seed Bought and Sold

Offices: Buffalo, N. Y. Members
 Toledo, Ohio New York Produce Exchange
 Seed Warehouse: Toledo Produce Exchange
 Located at Toledo, Ohio Buffalo Corn Exchange

A. W. HAROLD

GRAIN

BARLEY A SPECIALTY

717 Chamber of Commerce BUFFALO, N. Y.

H. T. BURNS,
PresidentBASIL BURNS,
Sec. - Treas.**Burns Grain Company**

BUFFALO, N. Y.

We invite correspondence and solicit consignments.

GET OUR BIDS AND MARKET REPORTS

L. E. HARMON, Pres.

GEO. F. BOOTH, Sec. and Treas.

BUFFALO CEREAL COMPANY

CEREAL MILLERS

Buyers of White Corn, Yellow Corn
and White Oats.

BUFFALO, N. Y.

BALTIMORE

CHAS. ENGLAND & CO.

RECEIVERS OF

GRAIN and HAY308-310 Chamber of Commerce
BALTIMORE, MD.

MINNEAPOLIS

J. L. McCAULL, President R. A. DINSMORE, Vice President
S. J. McCAULL, Secretary A. M. DINSMORE, Treasurer**The McCaull-Dinsmore Co.**
COMMISSION MERCHANTS915-16-17 CHAMBER OF COMMERCE
MINNEAPOLIS, MINN.

DULUTH

MILWAUKEE

OMAHA

GRAIN RECEIVERS

CHICAGO

GEO. S. DOLE, Pres. H. N. SAGER, Sec.
J. H. DOLE & CO.
 (Established 1852)
 Commission Merchants, Grain and Seeds
 We solicit your
CONSIGNMENTS
 and orders in futures
 226 La Salle Street. CHICAGO

E. W. BAILEY & CO.
 Commission Merchants
 GRAIN, SEEDS AND PROVISIONS
 72 Board of Trade CHICAGO

PHILIP H. SCHIFFLIN, Pres. EUGENE SCHIFFLIN, Secy.-Treas.
PHILIP H. SCHIFFLIN & CO.
 INCORPORATED
 Commission Merchants
 515-518 Postal Telegraph Bldg.
 CHICAGO, ILLINOIS
 Consignments of all kinds of Grain and Field
 Seeds a specialty



CHICAGO

SOMERS, JONES & CO.
 (INCORPORATED)
 COMMISSION MERCHANTS
 GRAIN AND FIELD SEEDS
 CHICAGO MILWAUKEE MINNEAPOLIS
 We are amply prepared to give the best of service on consign-
 ments of cash grain and on orders for future delivery.
 Make drafts on us and address all correspondence to us at
 82 Board of Trade, CHICAGO

ESTABLISHED 1886
M. M. FREEMAN & CO.
 COMMISSION MERCHANTS
HAY STRAW GRAIN
 WE WANT YOUR SHIPMENTS 44 Board of Trade CHICAGO WRITE FOR MARKET LETTER

ADOLPH KEMPNER
 COMPANY
 COMMISSION MERCHANTS
 Reliable Crop Information. Prompt and Faithful Service.
 50 Board of Trade, CHICAGO

Hulburt, Warren & Chandler
 Stock Brokers and Commission
 Merchants, Grain and Provisions.
 Business solicited in any department
 Receiving, Shipping, Futures
 130 S. La Salle St. CHICAGO

We Buy
 Wheat—Corn—Oats—Barley—Rye
 Send Samples
The Quaker Oats Co.
 Cereal Millers
 Grain Dept. 1600 Railway Exchange
 CHICAGO

CHICAGO

W. A. FRASER, Pres. W. A. FRASER, Jr., Vice-Pres.
 R. W. CARDER, Sec. and Treas.
W. A. FRASER CO.
 GRAIN COMMISSION
 715 Royal Insurance Bldg., CHICAGO, ILL.
 ST. LOUIS, MO. Tel. Wabash 1252 PEORIA, ILL.

EVERYONE HAS A HOBBY
 SO HAVE WE
CONSIGNMENTS
 THAT'S ALL TRY US
M. L. VEON & CO.
 762 INSURANCE EXCHANGE BUILDING, CHICAGO

Lamson Bros. & Co.
 ESTABLISHED 1874
 Commission Merchants
 AND
 Track Buyers of Grain
 6 Board of Trade CHICAGO
 Ask for Bids Consignments Solicited

WM. SIMONS, Pres. and Mgr. WARREN T. McCRAY, Vice-Pres.

 GEO. L. STEBBINS, Sec'y-Treas. E. E. RICE, Representative

POPE & ECKHARDT CO.
 Commission Merchants
Grain and Seeds

316-322 Western Union Building

CHICAGO



RUMSEY & COMPANY
 COMMISSION MERCHANTS
 Consignments a Specialty for Forty Years
 80-81 BOARD OF TRADE.
 CHICAGO
 Branch Offices
 PEORIA
 ST. LOUIS
 I. P. RUMSEY
 HENRY A. RUMSEY

J. Herbert Ware Edward F. Leland
CONSIGN
 your Grain and Seeds, and send your
 orders for
 GRAIN, PROVISIONS and STOCKS to
WARE & LELAND
 190 W. JACKSON BOULEVARD
 Royal Insurance Bldg.
 CHICAGO
 Long Distance Phones:
 Wabash 3262 Automatic 51073
 Your Interests Are Our Interests

GRAIN RECEIVERS

CHICAGO

ARMOUR GRAIN CO.**GRAIN DEALERS**

CONSIGNMENTS SOLICITED. This department is fully equipped in every way to give the very best service in Chicago.

137 S. La Salle St. CHICAGO

CHICAGO

H. M. PAYNTER**GRAIN COMMISSION**

Special attention given consignments of grain and seeds. Orders in futures carefully executed

402-408 Western Union Bldg., Chicago

All business transacted through and confirmed by H. W. Rogers & Bro.

CHICAGO

Gerstenberg & Company**COMMISSION MERCHANTS**

Grain Seeds and Mill Feed

Barley a Specialty

305-315 La Salle St., CHICAGO, ILL.

HELLO!

HELLO!!

HELLO!!!

¶ In order to get the best results from a telephone conversation, you have got to have a good connection. Just so in the handling of your business. ¶ Connect with the firm that is a live wire; that will look after your interests; call for re-inspection when necessary; get good prices; make quick returns, and give you liberal treatment. ¶ In other words, make a connection with

ROSENBAUM BROTHERS, 77 Board of Trade, CHICAGO.

¶ Send us your grain to be sold on consignment. ¶ Let us bid for it when you desire to sell to arrive. ¶ You'll make no mistake (either Toledo or Chicago). ¶ Let us hear from you.

PHONE.

TELEGRAPH.

WRITE.

HENRY H. FREEMAN & CO.**Hay, Straw and Grain
COMMISSION MERCHANTS**

Correspondence and Consignments Solicited.
Market Reports on Application.

66 Board of Trade CHICAGO, ILL.

HOOVER GRAIN COMPANY**OAT****Shippers**

Operate Atlantic and Grand Trunk Western Elevators
CHICAGO

F. E. WINANS & CO.**GRAIN AND FIELD SEEDS
COMMISSION MERCHANTS**

Barley, Oats, Wheat, Corn, Rye, Timothy, Clover,
Flax, Hungarian Millet

96 BOARD OF TRADE, CHICAGO

Write us freely on all matters pertaining to grain and field seeds. Your questions fully and cheerfully answered; particular attention paid to timothy seed and grain by sample. Consignments and speculative orders receive our careful personal attention.

B. S. WILSON

HARRY BOORE

B. S. Wilson & Co.**GRAIN, SEEDS and PROVISIONS**

1118-1119 Royal Insurance Bldg., Chicago

W. M. TIMBERLAKE, Manager Grain Department

E. C. BUTZ GRAIN CO.**Cash Grain Commission****Barley a Specialty**

601 Gaff Building CHICAGO, ILL.

G. T. CARHART

Pres.

L. S. HOYT,

Vice Pres.

A. N. HARWOOD,

Sec.-Treas.

Personal, experienced attention
given to all consignments to

CARHART, CODE, HARWOOD CO.**GRAIN COMMISSION MERCHANTS**

36 BOARD OF TRADE CHICAGO

J. P. GRIFFIN & COMPANY**Grain Commission**

61 BOARD OF TRADE

Long Distance Telephone
Harrison 5693

CHICAGO

Nye & Jenks Grain Co.

907-913 Postal Telegraph Bldg.,

Chicago, - Illinois

C. H. CANBY & CO.

8 Board of Trade

CHICAGO

We give special attention to handling the
hedges of grain dealers and millers in the future
markets. Write us.

RALPH McDERMID

McDERMID & CO.

Commission Merchants

Grain and Provisions

333-334 Postal Telegraph Bldg., CHICAGO, ILL.

Personal attention to Consignments and Orders
for Future Delivery.



JAMES H. RAWLEIGH
President

ALBERT L. WAYNE
Vice-President and Treasurer

EDWARD ANDREW
Secretary

NASH-WRIGHT GRAIN COMPANY**COMMISSION MERCHANTS****GRAIN AND PROVISIONS**

717-720 Postal Telegraph Building, CHICAGO

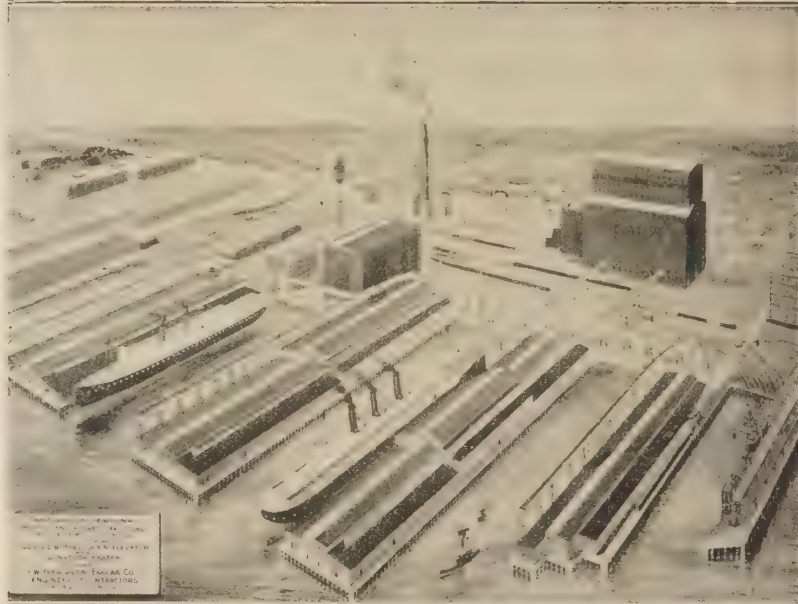
Long Distance Telephone Harrison 2379

MACDONALD ENGINEERING CO.

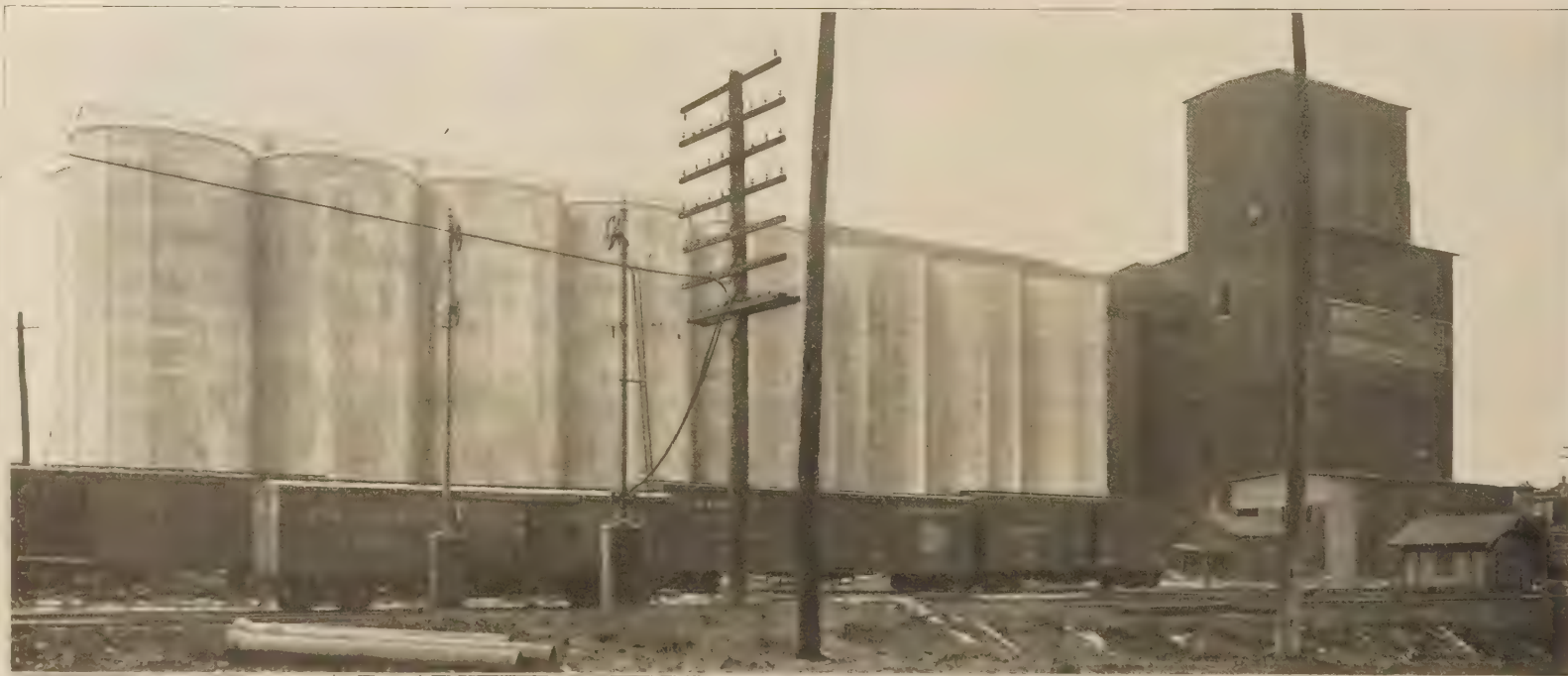
MONADNOCK BUILDING, CHICAGO



The above cut shows one of our latest models

Fire Proof Concrete Grain ElevatorIn this style we build *Transfer Elevators, Terminal Elevators*
or *Elevators at Country Points.* Write us.**Fireproof Grain Elevators**East Boston Terminal, Boston & Albany Railroad,
New York Central & Hudson River Railroad Co., LesseesDesigns and estimates promptly furnished
for all kinds of buildings for the handling
and storage of grain in any locality.**Witherspoon-Englar Company**

1244-1250 Monadnock Building, Chicago, Ill.

JOHN S. METCALF CO.
ENGINEERS AND CONSTRUCTORS**Plant of the Goemann Grain Co., Mansfield, Ohio**

In 1901 the 100,000 bushel frame elevator at the right side of the illustration was built. In 1906 the first six storage tanks were constructed, giving an additional storage of about 200,000 bushels. In 1912 ten more concrete tanks were added as shown at the left of the cut giving further capacity of about 300,000 bushel. Total capacity 600,000 bushels. All was designed and constructed by John S. Metcalf Co.

TERMINAL ELEVATORS, CONCRETE ELEVATORS, MILL CONSTRUCTION, POWER PLANTS, WHARFS

CHICAGO, ILLINOIS

Plans and Specifications a Specialty

MONTREAL, QUEBEC



**Burrell
Engineering and
Construction
Company**

Designers and Builders of

**GRAIN
ELEVATORS**

In Wood or Concrete

Rooms 1001-1004
Chicago Stock Exchange Building
CHICAGO, ILL.

1125 Chamber of Commerce Building,
DETROIT, MICH.

JAMES STEWART & CO.
GRAIN ELEVATOR DEPARTMENT

1811 Fisher Building
W. R. SINKS, Manager

CHICAGO
R. H. FOLWELL, Engineer



Grand Trunk Pacific Railway Co. Elevators at Fort William, Ont.
Capacity 3,500,000 Bushels.

**We Build Grain Elevators, Any Type of
Construction, in Any Part of the World**

Also General Contractors with Offices in the Following Cities,
Wire, Write or Call Personally.

NEW YORK, Hudson Terminal Building
PITTSBURGH, PA., Westinghouse Building
SAN FRANCISCO, CAL., 709 Mission Street
ST. LOUIS, MO., Bank of Commerce Building
NEW ORLEANS, LA., Hibernia Bank Building
DENVER, COLO., 1st National Bank Building
CANADIAN STEWART CO., Limited, Montreal, Can., Eastern Townships Bank Building
FORT WILLIAM, Ontario, Canada

Elevator Machinery and Supplies

**FLOUR AND FEED MILL MACHINERY
STEAM AND GAS ENGINES**

Pulleys, Shafting, General Power Transmission Machinery, Roll
Grinding and Corrugating

Largest Factory and Stock in Western Country

SEND FOR 450-PAGE CATALOG

GREAT WESTERN MFG. CO.

General Office and Factory
LEAVENWORTH, KAN.

Warehouse and Salesrooms
1221-1223 Union Ave.
KANSAS CITY, MO.

H. Phone M 2605

HEIDENREICH

Concrete
Grain
Tanks

U. S. Patent
667,172

One Hundred Million Bushels
Capacity in use today.

Plans, Specifications, Supervision.

E. LEE HEIDENREICH & CO.,
Consulting Engineers,
Dwight Bldg. Kansas City, Mo.

GRAIN ELEVATORS

built from our designs and by our force of workmen
are strong, substantial and economical in operation.

WOOD OR FIREPROOF

**T. E. IBBERSON
ELEVATOR BUILDER**

Corn Exchange Building

Minneapolis, Minn.

IN 1890 a prominent elevator
company painted with
DIXON'S SILICA-GRAPHITE PAINT

Since then it was repainted only
twice with the same paint.

Letter No. 17-B on request

JOSEPH DIXON CRUCIBLE CO.
Jersey City, N. J.



The Barnett & Record Co.

General Contractors
DESIGNERS AND BUILDERS OF

**Grain Elevators
Flour Mills and
Heavy Structures**

This Flour Mill and Grain Elevator recently constructed for the
St. Lawrence Flour Mills Co., Ltd., at Montreal, Quebec, Canada

Write for Designs and Estimates

OFFICES

Minneapolis, Minnesota

Duluth, Minnesota

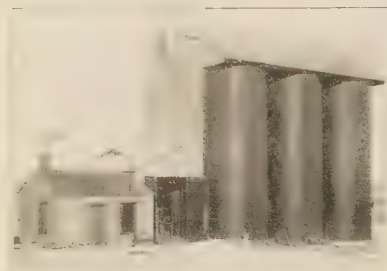
Fort William, Ontario

Fire Proof Steel Grain Elevators and Storage Tanks



The illustrations show types of elevators that we are building all through the Western States. They are an absolute insurance against fire, and for that reason they are the most economical elevator construction that can be found.

The Minneapolis Steel & Machinery Co. is equipped to furnish both steel and machinery with service, which, for efficiency and promptness, is not equalled in this kind of work.

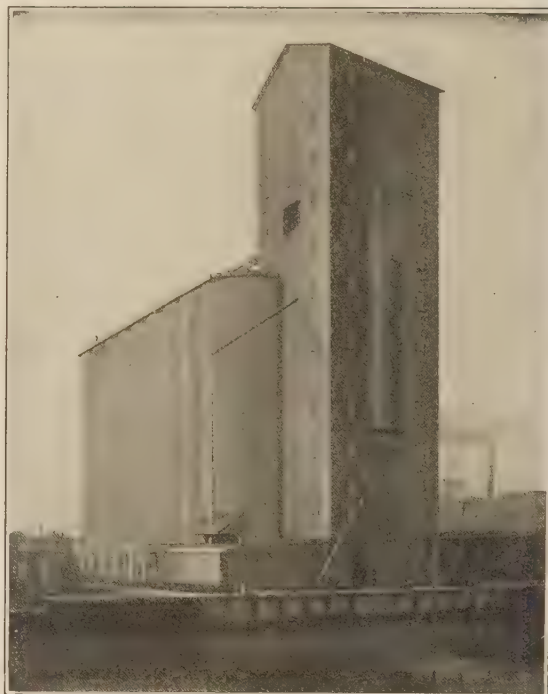


Minneapolis Steel & Machinery Co.

MINNEAPOLIS, MINN.

Denver, Colo. El Paso, Tex.
Spokane, Wash. Butte, Mont.
Salt Lake City, Utah

FIRE-PROOF GRAIN ELEVATORS CONCRETE OR STEEL BINS



WHEELER ELEVATOR, BUFFALO, N. Y.

MONARCH ENGINEERING CO.

Engineers and Contractors

Chamber of Commerce - - - BUFFALO, N. Y.
WRITE US FOR PRICES

Reliance Construction Company

Furnish Plans, Estimates and Build COUNTRY GRAIN ELEVATORS

Our long experience as a builder of elevators insures you an up-to-date house. Write today.

625 Board of Trade Building, - - - INDIANAPOLIS, IND.

Fred Friedline & Company

DESIGNERS AND BUILDERS

Transfer, Terminal and Country Elevators,
Warehouses, Tankage in Frame, Iron-Clad
or Fire-Proof Construction, Concrete Tanks

Plans and Specifications a Specialty.
Write for Sketches and Estimates.

315 S. La Salle Street CHICAGO.



Bowsher's All-Around Feed Mill

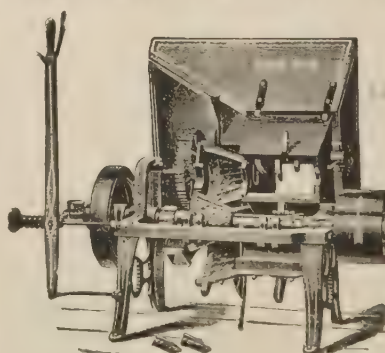
(Sold with or without sacking
elevator)

It CRUSHES ear corn (with or without
shucks) and GRINDS all kinds small grain
and KAFFIR IN THE HEAD. Has
CONICAL shaped GRINDERS,
DIFFERENT FROM ALL OTHERS.
RUNS LIGHT. Can run EMPTY
WITHOUT INJURY. Ahead of rolls or
stones in speed and quality of work.

YOU NEED a mill now. Quit THINKING
about it. COMMENCE to investigate.
Give US a chance and we'll tell you WHY
we think ours is the best.

SEVEN SIZES: 2 to 25 H. P.

Circular sent for the asking.



Drive pulley overhung. Belt to it from any
direction. Makes complete independent outfit.

THE N. P. BOWSHER CO., South Bend., Ind.



Reinforced Concrete Elevator of the
Northwestern Malt & Grain Co., Chicago
Capacity 650,000 Bushels

The Stephens Engineering Company

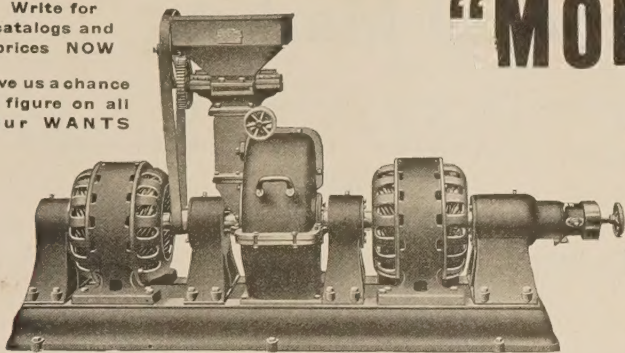
Engineers and Contractors

Monadnock Bldg.

CHICAGO, ILL.

Write for
catalogs and
prices NOW

Give us a chance
to figure on all
your WANTS



MONARCH BALL BEARING, DIRECT
MOTOR DRIVEN ATTRITION MILL

We manufacture the Largest, Most
Improved, and Most Complete Line of
Machinery for Flour and Feed Mills,
Grain Elevators, etc., in the World.

"MONARCH" BALL BEARING

FEED GRINDERS WILL ALWAYS

→ SOLVE ALL YOUR TROUBLES ←

A SAVING of 35% to 55% in POWER

DON'T FORGET

DIRECT CONNECTED ELECTRICALLY MOTOR DRIVEN

Ball Bearing Feed Grinders and
Corn Crackers OUR SPECIALTY

You cannot afford to operate your plant without one of these "Monarch" Mills, because of the large amount of power saved, or the tremendous increase in capacity, that you will obtain with your present power, Guaranteed never to get out of TRAM. TRY ONE OF THESE MILLS NOW, if you want Increased Profits.

SPROUT, WALDRON & CO., THE MILL P. O. BOX
BUILDERS 320

Muncy, Pa.

WESTERN OFFICE: MONADNOCK BLOCK (402) CHICAGO, ILL.

Branch Office { 613 McKay Bldg.
Portland, Ore.

INSURE WITH THE Michigan Millers Mutual Fire Insurance Co.

of
LANSING, MICHIGAN

and get, without extra cost, the benefit of their Scientific In-
spections of your plant, embracing

Common Hazards

Mechanical Hazards

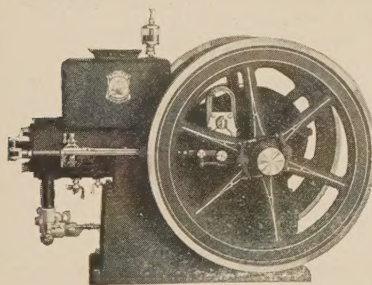
Electrical Hazards

Members of Mutual Fire Prevention Bureau

1879—LAUSON "FROST KING"—1913

Has High Grade Rotary Built-in Magneto and
no batteries to give you trouble or expense. En-
gine has hardened steel wearing parts. Gasoline
or Kerosene.

THE JOHN LAUSON MFG. CO.
59 Monroe Street New Holstein Wis



G. H. BIRCHARD

Contractor of

Grain Elevators

Especially Designed for Economy of
Operation and Maintenance
LINCOLN, NEB.

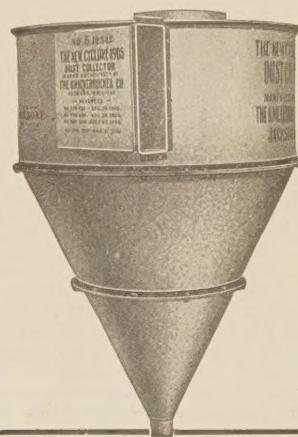
The Peerless Line

Includes Grain Feeders, Car Loaders,
Overhead Dumps, Man Lifts.
HIGH QUALITY FAIR PRICES
PEERLESS FEEDER COMPANY
RHINEHART SMITH, Mgr., Sidney, Ohio
Ohio Representative Union Iron Works

KENNEDY CAR LINERS

are the modern,
sure and cheap
way of avoiding
losses and trou-
bles occasioned
by leakage in
transit. Made by

FRED W. KENNEDY
SHELBYVILLE, IND.



The Difference

in the

Construction of its "Inwards"
Eliminates Three-quarters
of the Internal Friction.

THAT SAVES POWER

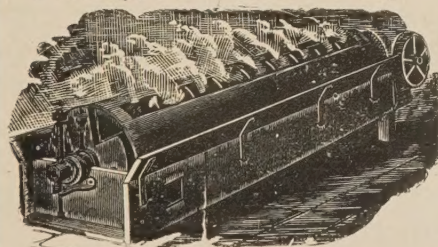
The New "1905" Cyclone Dust Collector

INVESTIGATE

Write for Our
Dust Collector Catalog

The Knickerbocker Co.
Jackson, Michigan

SEE THAT YOUR
CONTRACT CALLS FOR



THE CUTLER STEAM DRYER

SOLD BY ALL MILL FURNISHERS

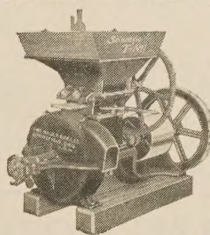
Not an Experiment. In successful use 30 years drying
CORN MEAL, HOMINY,
BREWERS' GRITS AND MEAL,
AND ALL CEREAL PRODUCTS.

ALSO SAND, COAL DUST, GRAPHITE, CLAY, ORES, ETC.

Automatic in operation, requiring no attention.

THE CUTLER CO., North Wilbraham, Mass.
CATALOG ON REQUEST

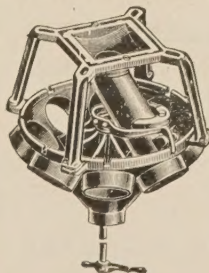
Scientific Feed Mills



Custom feed grinding is most profitable when
a Scientific mill is used—that's why there are
more Scientific mills in use than any other
kind. They bring custom to your mill because
they grind a uniform product of any degree of
fineness, and do it quickly.

We Build the Greatest Variety of
Feed Mills. Write for Catalog No. 429

The Bauer Bros Co., Springfield, O.



The Hall Signaling Distributor

is an investment. It is property. Instead of
a loss, it brings revenue, year in and year out,
greater than any other investment in grain
business. Any person who bought one over
ten years ago has it now as good as new, and
it will be just as good to his grandchildren.

HALL DISTRIBUTOR CO.
506 Ramge Bldg., OMAHA, NEBR.

Shrewd cal-
culators know
that renewals,
repairs, and
maintenance of
grain spouts are
expenses. Not in-
vestments. But
added together
at the end of
the year the
amount is con-
siderable, and is
all a LOSS, and
this is the small-
est loss occa-
sioned by their
use.

MILLERS' MUTUAL FIRE INSURANCE ASSOCIATION OF ILLINOIS

Established 1878. Alton, Illinois

Insurance on Flour Mills and Eleva-
tor Properties.

Grain Insurance for short terms a
Specialty.

CASH ASSETS - \$473,253.91

G. A. MCKINNEY, Sec'y

Leading Grain Receivers in all Markets

ATLANTA, GA.

Dunn, W. P., wholesale brokerage and commission, flour, grain, hay, mill feeds, cottonseed meal and hulls.*
Joseph Gregg & Son, grain and hay brokers.*†

BALTIMORE, MD.

England & Co., Chas., grain and hay receivers.*†
Hax & Co., G. A., grain and hay receivers.*†

BLOOMINGTON, ILL.

Baldwin Grain Co., brokers.
Hasenwinkle Grain Co., grain commission merchants
O'Neill & Gyles, grain brokers.
Slick & Co., L. E., grain receivers and shippers.

BUFFALO, N. Y.

Alder-Stofer Grain Co., grain commission.*
Buffalo Cereal Co., grain.*
Burns Grain Company, grain commission.
Churchill Grain & Seed Co., grain and seeds.*
Harold, A. W., grain merchant.

CHAMPAIGN, ILL.

Sledge, J. P., grain broker.*

CHICAGO, ILL.

Armour Grain Co., grain buyers.*
Bailey & Co., E. W., commission merchants.*
Butz Grain Co., E. G., grain commission.
Canby & Co., C. H., commission merchants.*
Carhart, Code, Harwood Co., grain commission.
Delaney, Frank J., grain commission.
Dickinson Co., Albert, seeds.
Dole & Co., J. H., commission merchants.*
Fraser Co., W. A., grain commission.*
Freeman & Co., Henry H., hay, straw and grain.†
Gerstenberg & Co., grain and seeds.*
Griffin & Company, J. P., grain commission.
Hooper Grain Co., receivers and shippers.*
Hulburd, Warren & Chandler, com. merchants.
Illinois Seed Co., seed merchants.
Kempner Company, Adolph, commission merchants.
Lamson Bros. & Co., commission merchants.*
McDermid & Co., commission merchants.
McKenna & Rodgers, commission merchants.*
Albert Miller & Co., hay and produce.†
Nye & Jenks Grain Co., commission merchants.*
Paynter, H. M., grain commission.
Pope & Eckhardt Co., grain and seeds.*
Rosenbaum Brothers, receivers and shippers.*†
Rumsey & Co., commission merchants.*
Sawers Grain Co., grain commission.*
Schiffin & Co., Philip H., commission merchants.*
Shaffer & Co., J. C., buyers and shippers.*
Somers, Jones & Co., commission merchants.*
Thayer & Co., C. H., grain and seeds.
Van Ness, Gardiner B., grain commission.*
Vehon & Co., M. L., commission merchants.
Wagner & Co., E. W., receivers and shippers.*
Ware & Leland, grain and seeds.*
Wilson & Co., B. S., grain, seed and provisions.*
Winans & Co., F. E., grain and field seeds.

COLUMBUS, OHIO.

McAlister, Jas. P., & Co., shippers grain and hay.

CRAWFORDSVILLE, IND.

Crabbs-Reynolds-Taylor Co., grain and seeds.*†

CROWLEY, LA.

Lawrence Brothers Co., Ltd., grain, nutriline feed.

DES MOINES, IOWA.

Lockwood Grain Co., B. A., flour and grain dealers.*

DECATUR, ILL.

Baldwin & Co., H. I., grain brokers.*

DETROIT, MICH.

Dumont, Roberts & Co., receivers and shippers.*

FORT WAYNE, IND.

Bash & Co., S., grain and seeds.
Egley-Doan Elevator Co., grain, seeds, hay.*†
Niezer & Co., grain, hay, straw, seeds, coal.*†

GREENVILLE, OHIO.

Grubbs Grain Co., E. A., buyers and shippers.*

HARRISBURG, PA.

Harrisburg Feed and Grain Co., grain and feed.†

INDIANAPOLIS, IND.

Boyd, Bert A., grain commission.*
Mutual Grain Co., grain commission.*

JACKSONVILLE, FLA.

Wilson & Parker Co., commission merchants.*†

KANSAS CITY, MO.

Thresher-Fuller Grain Co., grain commission.*

LANCASTER, PA.

Eby & Son, Jonas F., receivers and shippers.†

LIMA, OHIO.

Ward Grain Co., dealers and brokers.*

LOUISVILLE, KY.

Callahan & Sons, receivers and shippers.*
Thomson & Co., W. A., receivers and shippers.

MILWAUKEE, WIS.

Bacon Co., E. P., grain commission merchants.*
Bell & Co., W. M., commission merchants.*
Donahue-Stratton Co., buyers and shippers.*
Fagg & Taylor, shippers.*
Franke Grain Co., receivers and shippers.
Mereness & Potter Grain Co., grain and seeds.*
Mohr-Holstein Commission Co., grain commission.

MINNEAPOLIS, MINN.

McCaull-Dinsmore Co., commission merchants.*
Minneapolis Seed Co., seeds.
Quinn, Shepherdson Co., grain commission.*

NASHVILLE, TENN.

Hale & Sons, J. R., grain, seeds.*

NEW CASTLE, PA.

Hamilton, C. T., hay, straw, grain, millfeed, produce.†

NEW ORLEANS, LA.

Leonhardt & Co., A. F., grain and hay.*†

NEW YORK, N. Y.

American Hay Company, hay.†
Brooklyn Hay & Grain Co., hay, straw and grain.†
Forbell & Co., L. W., commission merchants.*†

NORFOLK, VA.

Cofer & Co., Inc., J. H., grain.*
Cofer, Vernon L., hay, grain, feed.*†
LeGrand & Burton, grain and hay brokers.†
Reed & Bro., Inc., D. P., hay, grain, mill feeds.*

OMAHA, NEB.

Cavers Elevator Co., receivers and shippers.*

PEORIA, ILL.

Buckley, Pursley & Co., commission merchants.*
Dewey & Sons, W. W., grain commission.
Feltman, C. H., grain commission.†
Grier & Co., T. A., grain commission.
Miles, P. B. & C. C., grain commission.*†
Mueller Grain Co., receivers and shippers.†
Rumsey, Moore & Co., grain commission.*
Tyng, Hall & Co., grain commission.*

PHILADELPHIA, PA.

Delp Grain Co., E. E., grain and feeds.*†
Lemont & Son, E. K., hay, grain, mill feeds.*†
Miller & Sons, L. F., receivers and shippers.*†
Richardson Bros., grain, flour, mill feeds.*

PITTSBURG, PA.

Hardman & Heck, hay, grain and feed.†
Heck & Co., W. F., receivers and shippers.†
McCaffrey's Sons Co., Daniel, grain and hay.*†
McCague, R. S., grain and hay.*†
Morgan, H. G., hay and grain.†
Stewart & Geidel, D. G., grain, hay and feed.†

RICHMOND, VA.

Adams Grain & Provision Co., receivers shippers, exporters.*†
Beveridge & Co., S. T., grain, hay, feed, seeds.*†
Richardson, Jr., Co., Inc., W. F., grain and feeds.*

SAGINAW, MICH.

The Henry W. Carr Co., receivers and shippers.*†

SALT LAKE CITY, UTAH.

Smurthwaite Grain & Milling Co., C. A., grain, flour, hay, seeds.

ST. LOUIS, MO.

Elmore-Schultz Grain Co., receivers and shippers.
Mullally Commission Co., John, com. merchants.*†
Picker & Beardsley Com. Co., grain, hay and seeds.*†
Prunty, Chas. E., grain and seeds.

TOLEDO, OHIO.

Devore & Co., H. W., grain dealers.
The Goemann Grain Company, grain merchants.*†
King & Co., C. A., grain and seeds.*
Paddock-Hodge Co., receivers and shippers.*
Raddatz & Co., H. D., grain and seeds.
Southworth & Co., grain and seeds.*†
Wickenhiser & Co., John, grain dealers.
Zahm & Co., J. F., grain and seeds.*

*Members Grain Dealers' National Association.

†Members National Hay Association.

UNIVERSAL GRAIN CODE

(and Mill Feed Supplement)

COMPILED FOR USE OF

GRAIN and MILLING TRADES

OF THE

United States and Canada

This Code meets the present day requirements of the grain and milling trades—is up-to-date in every respect and thoroughly covers the changes in methods and business that have come into use of late years.

The translation expressions and tabulated matter is a great improvement upon any public grain and milling code now in use, and is an assured factor in saving tele-

graph tolls and misunderstandings in telegraphing.

The Universal Grain Code is being used by many hundreds of the most active firms in the country.

A list of Code Users is sent gratis with every copy of the Universal Grain Code, the names and addresses being published free of charge.

Send for a Copy Now. Price \$3.00.

MITCHELL BROTHERS PUBLISHING CO.

431 S. Dearborn Street

CHICAGO, ILL.

Progressive Grain Men

Are interested in all phases of the grain business, the milling as well as the marketing of grain. They aim to keep in touch with the consuming trade and know what becomes of their grain in the markets of the world. Such men find the

AMERICAN MILLER

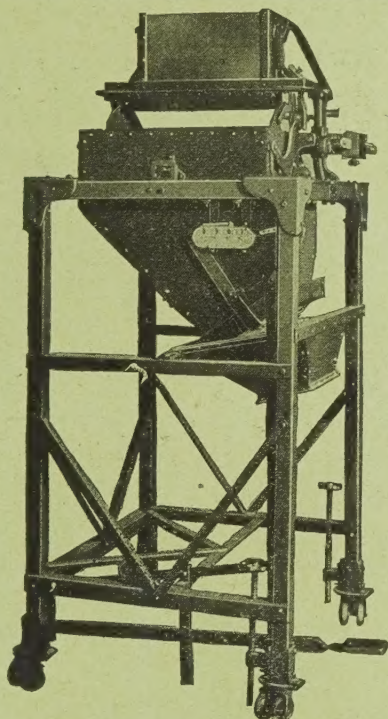
a big help because it fully covers the business of milling wheat and other cereals.

Published on the first of each month, it gives all the news of the milling world and prints a large amount of technical matter that is of interest to the elevator man as well as the miller.

We will send the American Elevator and Grain Trade and American Miller to one address for one year at the combination price of \$2.50. Send in your subscription now.

NOT A BILL OF EXPENSE BUT A SOURCE OF REVENUE

Enables
Shippers
to
Collect
Claims
—
Requires
No
Repairs
—
Occupies
Small
Space
—
Most
Economical
to
Install



PORTABLE BAGGER

Write for Catalog.

No Bother
to
Operate
—
Never
Gets Out
of
Order
—
Will Not
Rust
or
Wear Out
—
60 Days'
Trial

National Automatic Scale Co.
Bloomington, Illinois

Needed By Elevator Operators

¶ Elevator owners, large and small, who desire to operate their houses to the best advantage need the

BOOK of WRINKLES

THIS is a collection, in book form, of a large number of handy and labor-saving devices contributed by readers of the "American Miller." A considerable proportion can be adopted to advantage in elevators and will save time and money. The wrinkles include improvements in spouts, elevators, belts and cleaners. Every idea is original and has been put into practical use.

A 136-Page Book, Fully Illustrated
Price \$1.00

Mitchell Bros. Publishing Co.

431 S. Dearborn Street,

Chicago, Illinois

The First National Bank of Chicago

Charter No. 8

Statement of Condition at Close of Business Feb. 4, 1913

ASSETS.		
Loans and Discounts.....	\$ 85,586,825.73	
United States Bonds (par value).....	2,359,000.00	
Other Bonds and Securities (market value).....	6,071,245.81	
National Safe Deposit Co. Stock (Bank Building).....	1,250,000.00	
Cash Resources—		
Due from United States Treasurer.....	\$ 925,450.00	
Cash and Due from Banks.....	50,896,519.84	51,821,969.84
		\$147,089,041.38
LIABILITIES.		
Capital Stock paid in.....	\$ 10,000,000.00	
Surplus Fund.....	10,000,000.00	
Other Undivided Profits.....	1,897,477.08	
Discount Collected but not Earned.....	637,822.80	
Special Deposit of United States Bonds.....	1,700,000.00	
Circulating Notes Received.....	\$2,109,000.00	
Less Amount on Hand.....	0.00	
		2,109,000.00
Dividends Declared But Unpaid.....	1,965.75	
Reserved for Taxes.....	53,136.21	
Deposits.....	120,689,639.54	
		\$147,089,041.38

JAMES B. FORGAN, President.

Vice Presidents.

HOWARD H. HITCHCOCK	AUGUST BLUM	M. D. WITKOWSKY
FRANK O. WETMORE	CHARLES N. GILLET	ARTHUR W. NEWTON
EMILE K. BOISOT	CHARLES H. NEWHALL	

HENRY A. HOWLAND, Cashier.

Assistant Cashiers.

WILLIAM H. MONROE	H. H. HEINS	JOHN F. HAGEY
EDWARD S. THOMAS	A. C. C. TIMM	R. F. NEWHALL
JOHN P. OLESON	WILLIAM J. LAWLOR	GEORGE H. DUNSCOMB

Auditing Department

H. L. DROEGEMUELLER.....	Auditor
Clerical and Bookkeeping Departments	
WILLIAM H. MONROE.....	Asst. Cashier
Credit and Statistical Department	
J. W. LYNCH.....	Manager
Discount and Collateral Department	
CHARLES M. WALWORTH.....	Manager

Foreign Exchange Department

JOHN J. ARNOLD.....	Manager
CHAS. P. CLIFFORD.....	Asst. Manager

Law Department

EDWARD E. BROWN.....	Attorney
JOHN NASH OTT.....	Asst. Attorney

Transit and General Books Department	
CHARLES R. MCKAY.....	Manager



First Trust and Savings Bank

Statement of Condition at Commencement of Business Feb. 5, 1913

ASSETS.		
Bonds.....	\$20,840,553.91	
Time Loans on Collateral.....	18,643,773.64	
Demand Loans on Collateral.....	\$12,291,620.94	
Cash and Due from Banks.....	10,923,713.65	23,215,334.59
		\$62,699,662.14
LIABILITIES.		
Capital.....	\$ 5,000,000.00	
Surplus and Undivided Profits.....	2,644,849.20	
Reserved for Interest and Taxes.....	96,641.65	
Time Deposits.....	\$43,592,382.31	
Demand Deposits.....	11,365,788.98	54,958,171.29
		\$62,699,662.14

OFFICERS.

JAMES B. FORGAN.....	President	FRANK M. GORDON.....	Mgr. Bond Dept.
EMILE K. BOISOT.....	Vice President	ROY C. OSGOOD.....	Asst. Trust Officer
LOUIS BOISOT.....	Trust Officer	C. G. FLEAGER.....	Asst. Treasurer
BURT C. HARDENBROOK.....	Cashier	A. W. CONVERSE.....	Asst. Secretary
ROBERT D. FORGAN.....	Treasurer	ROBT. L. DAVIS.....	Mgr. Real Est. Dept.
DAVID V. WEESTER.....	Secretary	EDWARD E. BROWN.....	Attorney
		JOHN NASH OTT.....	Asst. Attorney

DIRECTORS.

First National Bank and National Safe Deposit Company.

BENJAMIN ALLEN	JAMES J. HILL	EUGENE S. PIKE
SAMUEL W. ALLERTON	H. H. HITCHCOCK	H. H. PORTER, JR.
A. C. BARTLETT	MARVIN HUGHITT	NORMAN B. REAM
E. K. BOISOT	E. T. JEFFERY	JOHN A. SPOOR
WILLIAM L. BROWN	WM. J. LOUDERBACK	BERNARD E. SUNNY
A. A. CARPENTER	HAROLD F. MCCORMICK	WM. J. WATSON
D. MARK CUMMINGS	EDWARD MORRIS	FRANK O. WETMORE
JAMES B. FORGAN	CHARLES H. MORSE	C. M. WOOLLEY

Also Directors and Members of the Advisory Committee of the First Trust and Savings Bank.

Combined Deposits of Both Banks, \$175,647,810.83

HOW the Engine RAN and WHAT Was SAID.

The CHARTER, way back in the '80's and early '90's ran so Strongly, Smoothly, Safely, Silently, Savingly, that all observers said

**"Just the Power
for Me."**

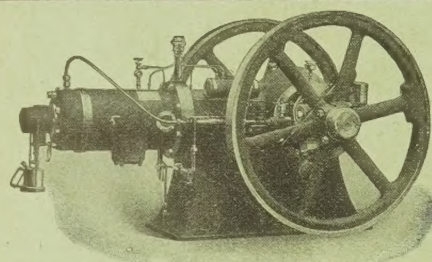
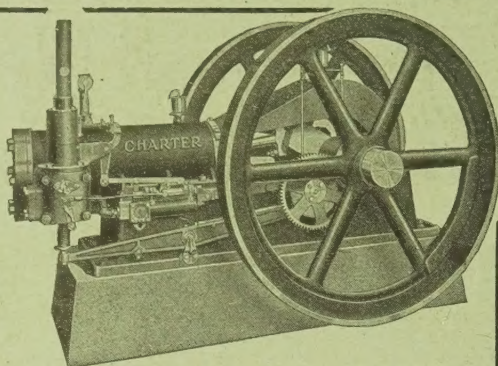
This was before any other Internal Combustion Engine was marketed using Gasoline or any Product of the Distillation of Petroleum, so ever since in our ads we have had

"The Original Gasoline Engine of the World"

We have kept up the Substantial Construction, Simplicity and Efficiency of the CHARTER. Every Auto, Motorcycle, Rail Road Gasoline Motor Car and Air Ship you see dates its possibilities back to our shop and the tens of thousands of dollars spent therein in experimenting in the years between 1882 and 1890. Now we have added and fully proven

The CHARTER TYPE "R" a radical departure from the old line CHARTER. In workmanship, High Degree of Finish and Thorough Honest Manufacture, this type is the outgrowth of nearly 50 years' experience in building and marketing Dependable, Durable and Efficient Machinery, also many more years than any other builder of Oil Engines. Send for catalog showing nearly 300 various uses, and state your power needs.

400 Locust Street **CHARTER GAS ENGINE CO. STERLING ILL., U.S.A.**



It Costs 5c an Hour

to operate a 25 H. P. Muncie Oil Engine, other sizes in proportion,

Uses Crude Oil, Fuel Oil, Gas Oil, Solar Oil, Kerosene or Distillate.

But two mechanically operated attachments. Powerful, Simple, Automatic and Durable. Write us.

MUNCIE GAS ENGINE & SUPPLY CO.

Liberty Street

MUNCIE, IND

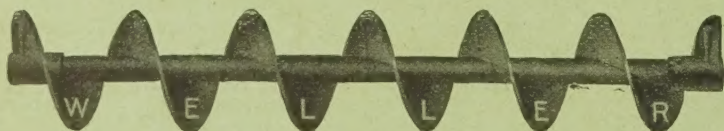
WELLER—MADE

Elevating and Conveying
Systems that are *RIGHT*
from Every Point.



Weller workmanship is superb. The high-grade help and the unusual thoroughness of manufacturing exercised in every department, combined with the superior quality of the materials, are features that insure unfailing reliability.

Write our Engineering Department if you want to lower your handling costs. They will willingly give you suggestions and estimates on equipment that will save labor and time and systematize the work throughout. No obligation attached to this.



Spiral Conveyors

The Weller Spiral Conveyor has Cold Rolled Sectional Flights, because this style of construction is the most reliable. Get prices on these, also on Belt Conveyors, Car Loaders, Scoops, Elevator Buckets, etc. Ask for catalog No. 20.

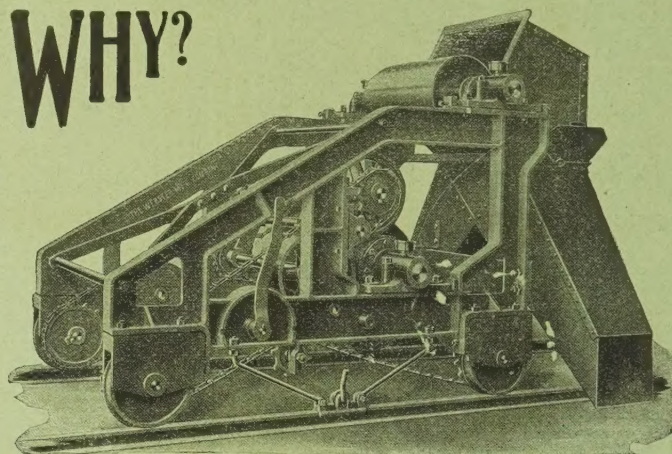
WELLER MFG. CO.,

Chicago

Nobody Would Think Of building an Elevator without getting Webster's Figures on the equipment

And then the Webster figures are made the basis of comparison for all the bids received.

WHY?



BECAUSE—everybody knows that Webster Grain Handling Machinery and Power Transmission Equipment are the best that can be bought. "You can't get away from Webster Leadership in this line of work."

Above is shown style L Belt Conveyor Tripper, the latest development in Webster Progress.

The Webster M'f'g Company
Tiffin, O.

NEW YORK
88-90 Reade St.

CHICAGO
815-817 Fisher Bldg.

Did It Ever Occur to You

That the best way to get what you want, and get it promptly, is to send your orders to people who have had experience in the business and who carry a stock of goods always ready for quick shipment? We have been in the Elevator and Mill Furnishing business over twenty-five years and feel that we know something about it. We carry in stock a complete line of supplies, including Testing Sieves, Transmission Rope, Belting, Steel Split Pulleys in sizes up to 54-inch, Elevator Buckets, Conveyor Chain Belting, Sprockets, Lace Leather, Scoops, Shafting, Collars, Bearings, etc., etc. Send us your orders. We will satisfy you.

**THE
STRONG-SCOTT MANUFACTURING CO.**
MINNEAPOLIS, MINN.

Northwestern Agents for The Great Western Mfg. Co., Richardson Automatic Scales, Invinolite Cleaners, Knickerbocker Dust Collectors

No More Dust

if your elevator is
equipped with the

Day Dust Collector

Storm Proof—Spark Proof

In use in all best elevators.

Write

THE DAY COMPANY

38 So. 12th Street
MINNEAPOLIS, MINN.

